

# Western Region HIV Annual Epidemiological Profile

Data reported through June 30, 2017

Center for HIV Surveillance, Epidemiology and Evaluation Infectious Disease Prevention and Health Services Bureau Prevention and Health Promotion Administration Maryland Department of Health http://phpa.health.maryland.gov/OIDEOR/CHSE 1-800-358-9001

### Acknowledgements

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### Section I – Background Information

### HIV/AIDS Reporting Requirements

The Maryland HIV/AIDS Reporting Act of 2007 went into effect on April 24, 2007. The law expanded HIV/AIDS reporting and required that HIV cases be reported by name. The following highlights the reporting requirements of Health-General Articles 18-201.1, 18-202.1, and 18-205 of the Annotated Code of Maryland, as specified in the Code of Maryland Regulations (COMAR) 10.18.02.

- Physicians are required to report patients in their care with diagnoses of HIV or AIDS immediately to the Local Health Department where the physician's office is located by mailing the Maryland Confidential Morbidity Report (DHMH 1140). Reports are also accepted by phone.
- Physicians are required to report infants born to HIV positive mothers within 48 hours to the Maryland Department
  of Health by mailing the Maryland Confidential Morbidity Report (DHMH 1140). Reports are also accepted by
  phone.
- Clinical and infection control practitioners in hospitals, nursing homes, hospice facilities, medical clinics in
  correctional facilities, inpatient psychiatric facilities, and inpatient drug rehabilitation facilities are required to report
  patients in the care of the institution with diagnoses of HIV or AIDS within 48 hours to the Local Health
  Department where the institution is located by mailing the Maryland Confidential Morbidity Report (DHMH 1140).
  Reports are also accepted by phone. Facilities with large volumes are encouraged to contact the Maryland
  Department of Health to establish electronic reporting.
- Laboratory directors are required to report patients with laboratory results indicating HIV infection (e.g., positive confirmatory HIV diagnostic tests, all CD4 immunological tests, all HIV viral load tests, and all HIV genotype and phenotype tests) within 48 hours to the Local Health Department where the laboratory is located, or if out of state to the Maryland Department of Health, by mailing the State of Maryland HIV/CD4 Laboratory Reporting Form (DHMH 4492). Laboratories are encouraged to contact the Maryland Department of Health to establish electronic reporting.

Reporting forms and instructions, including mailing addresses and phones numbers, are available on our website: https://phpa.health.maryland.gov/OIDEOR/CHSE/Pages/reporting-material.aspx

### For Assistance with HIV/AIDS Reporting

For assistance with reporting, including establishment of routine, electronic, or other alternate methods of reporting to the Maryland Department of Health, please contact the Center for HIV Surveillance, Epidemiology and Evaluation in the Maryland Department of Health at 410-767-5227.

#### Limitations in the HIV/AIDS Data

This epidemiological profile only contains data for HIV and AIDS cases that have been diagnosed by a health care provider, were reported to the health department by name, and were residents of Maryland at the time of diagnosis or are current residents of Maryland as of 12/31/2016. Nationally, it has been estimated that 15.0% of people living with HIV infection are undiagnosed. In Maryland, it has been estimated that 15.3% of people living with HIV infection are undiagnosed. In addition, despite a massive effort during which over 17,000 HIV cases were reported after the Maryland HIV reporting law changed on April 24, 2007, not all diagnosed HIV cases previously reported by Maryland's code-based identifier were located and re-reported by name. Many of the re-reported HIV cases were identified by a recent diagnosis and not by their earliest diagnosis, resulting in an under-reporting of HIV diagnoses before 2001 and an over-reporting of HIV diagnoses from 2001 to 2008. Surveillance is the ongoing systematic collection, analysis, interpretation, and dissemination of case report data. Case report data are only available for cases receiving medical care, often only at facilities in Maryland, and only includes information that has been reported to the health department. Linkage to care data is based solely on laboratory data reported to the health department.

This epidemiological profile provides estimates of living Maryland diagnosed cases by current residence as of 12/31/2016. Residence at diagnosis is used exclusively to describe new HIV and AIDS diagnoses. Current residence data are restricted to cases for which there is a case report form or laboratory test reported between 1/1/2009 and 6/30/2017. Restricting address data to recent years presents the most accurate data available and helps to account for cases that may have moved out of state whose data would no longer be reported in Maryland. However, current residence data excludes cases that may still be residents of Maryland but have not received any HIV care during the most recent eight and a half years. In addition, residence is dynamic and cases may have resided at multiple addresses that cannot all be represented in single time point estimates.

For additional information regarding current residence, please contact the Center for HIV Surveillance, Epidemiology and Evaluation in the Maryland Department of Health at 410-767-5227.

### Stages of a Case of HIV/AIDS

Untreated HIV disease progresses from HIV infection to AIDS to death. These are biological events that occur whether or not a person receives any medical care. For example, a person can be HIV infected but never have an HIV test and so they do not have an HIV diagnosis. A medical provider diagnoses that these biological events have occurred and records them as a medical event. The law requires medical providers to report these medical events to the Health Department, thereby creating a surveillance event.

Time Point	Biological Event	Medical Event	Surveillance Event
1	HIV Infection		
2		HIV Diagnosis	
3			HIV Report
4	AIDS Conditions		
5		AIDS Diagnosis	
6			AIDS Report
7	Death		
8		Death Diagnosis	
9			Death Report

A case of HIV/AIDS can only move through time in one direction, from HIV infection to death report [from time point 1 to time point 9], but may skip over individual stages. Events can occur simultaneously, but usually there is a time lag between them. The time lag between events can be measured in days, months, and years.

For example, the time between HIV infection [time point 1] and the test that diagnoses HIV [time point 2] may be several years, and it may then take several days for the laboratory and physician to report the diagnosis to the health department [time point 3]. In a second example, a person with diagnosed and reported HIV infection [time point 3] may die [time point 7] without developing AIDS, thereby skipping the three AIDS events (conditions, diagnosis, and report [time points 4, 5 and 6]). And in a third example, a person with undiagnosed HIV infection [time point 1] may become sick, enter the hospital, and die [time point 7] of what is later determined to be AIDS. In that situation, HIV diagnosis [time point 2], AIDS diagnosis [time point 5], and death diagnosis [time point 8] would all occur at the same time, and that would probably be many years after the initial HIV infection [time point 1].

### Changes in Case Terminology

The terminology for HIV and AIDS cases was changed from earlier epidemiological profiles to be more precise, with Reported Diagnoses replacing Incidence and Living Cases replacing Prevalence. Incidence is a measure of the number of new events (such as HIV infections) in a population during a period of time. Prevalence is a measure of the number of people living with a condition (such as HIV) in a population at a certain time. Prevalence includes both newly and previously diagnosed cases as well as undiagnosed infections. For HIV, Incidence and Prevalence cannot be directly measured and must be estimated using statistical methods. The HIV surveillance system is able to provide the actual number of diagnoses and deaths that are reported in the population.

For this epidemiological profile, the reports received through a certain time (six months after December 31<sup>st</sup> of the specified year) are used to generate the number of diagnoses during the prior years. This lag time allows for delays in reporting and time to complete investigations. Instead of the previous one-year lag, this epidemiological profile utilizes a six-month lag, and as a result, data on exposure category and deaths for the prior year are preliminary. For example, the Reported HIV Diagnoses for 2016 are the total of the reported HIV cases with or without an AIDS diagnosis, diagnosed with HIV during 1/1/2016-12/31/2016, as reported by name through 6/30/2017.

To calculate the number of Living Cases we count up all of the Reported Diagnoses from the beginning of the epidemic (all the new cases each year) and subtract all of the Reported Deaths. For example, the Total Living HIV Cases on 6/30/2017 are the total of the reported HIV Cases with or without an AIDS diagnosis and not reported to have died as of 12/31/2016 as reported by name through 6/30/2017.

#### Laboratory Data

CD4+ T-lymphocyte tests are measures of a person's immune system function. An HIV infected adult is considered to have AIDS if they have less than 200 CD4+ cells per microliter of blood or if the percent of T-Lymphocyte cells that are CD4+ cells is less than 14%. Viral load (VL) tests are measures of the amount of HIV in a person's body. The goal of HIV treatment is to have a very low number of copies of virus per milliliter of blood, below what the test can measure, which is called an undetectable level. Low levels of VL, such as less than 200 copies per milliliter of blood, are known as viral suppression. Treatment recommendations are that a person in HIV medical care should have their CD4 and VL levels measured regularly, at least once per year. We use the presence of these lab tests as an indicator that someone has been "linked to care" after diagnosis or is "retained in care."

#### Sources of Data

Information on HIV and AIDS diagnoses, including residence at diagnosis, age, race/ethnicity, sex at birth, current gender, country of birth, vital status, HIV exposure category, and CD4 and HIV viral load test results are from the Maryland Department of Health's Enhanced HIV/AIDS Reporting System (eHARS), June 30, 2017.

Population data by sex, age, and race/ethnicity are from the July 1, 2016 U.S. Census Estimates. Population data by country-of-birth are from the Census Bureau's 2015 American Community Survey. This produces a difference in total population due to the different source. Due to estimation limitations, some population totals may not equal the sum of its components. When needed, age groups were divided by assuming uniform age distribution within the age group. Non-Hispanic multiple race and Non-Hispanic some other race from the Census were combined into one group.

Estimations of those undiagnosed are from Centers for Disease Control and Prevention's 2015 HIV Surveillance Supplemental Report published July 2017. The continuum of care is adapted from a 2011 article in Clinical Infectious Diseases in which a continuum of care "cascade" is used to illustrate estimates of the number of persons living with HIV who belong to each of the stages of engagement in HIV care.

#### **Tabulation of Column Totals**

Numbers in figures, tables and generally in the text have been rounded. Discrepancies in tables between totals and sums of components are due to rounding.

#### **Data Suppression**

In order to protect the confidentiality of reported HIV cases, data are suppressed in the following instances:

- Data describing a demographic group or geographic area (e.g. ZIP code) with a population less than 1,000 people.
- All clinical/laboratory information if it is describing less than 5 cases.
- All exposure/risk information if it is describing less than 5 cases, except in the case of "other" exposure.
- If any cell is suppressed, additional cells are also suppressed as necessary to prevent back calculation of the suppressed cell(s).

#### **HIV Exposure Categories**

The Centers for Disease Control and Prevention (CDC) developed a hierarchy of exposure categories for surveillance purposes. Persons with more than one reported risk factor are classified in the exposure category listed first in the hierarchy and therefore counted only once. Men who have sex with men and report injection drug use constitutes a separate transmission category.

MSM/IDU: Men who report a history of sexual contact with other men who also have engaged in injection drug use.

**Men who have Sex with Men (MSM):** Men who report a history of sexual contact with other men (homosexual contact) including men who report sexual contact with both men and women (bisexual contact).

**Injection Drug Use (IDU):** Men or women who report receiving an injection, either self-administered or given by another person, of a drug that was not prescribed by a physician.

**Heterosexual Exposure (HET)**: Men or women who report a history of sexual contact with a person of the opposite sex who is known to have an HIV infection or at high risk for an HIV infection. High risk groups include bisexual men, IDUs and recipients of blood, blood components, transplants of organ or tissue and artificial insemination.

Perinatal Exposure: Any baby born to an HIV positive mother.

**Other Exposure**: Includes men or women who received clotting factor for hemophilia/coagulation disorder, or received a transfusion of blood/blood components, or received a transplant of tissue/organs or artificial insemination, or worked in a health care or clinical laboratory setting.

Not all exposure data is reported and is therefore missing for some cases. Multiple imputation is a statistical method by which missing exposure categories are replaced with estimated or probable exposure categories. Multiple imputation involves filling in the missing exposure category with multiple possible exposures, creating several complete datasets. Filling in the missing exposure category is done using the observed data for the individual case as well as data in aggregate from other cases in Maryland. The complete datasets, containing the various predictions for each missing exposure category, are combined to create a final dataset with previously missing exposure category replaced by weighted estimates.

#### **MDH Non-Discrimination Statement**

The Maryland Department of Health (MDH) complies with applicable Federal civil right laws and does not discriminate on the basis of race, color, national origin, age, disability in its health programs and activities.

#### **English**

Help is available in your language: 410-767-5227 (TTY: 1-800-735-2258). These services are available for free.

#### Español/Spanish

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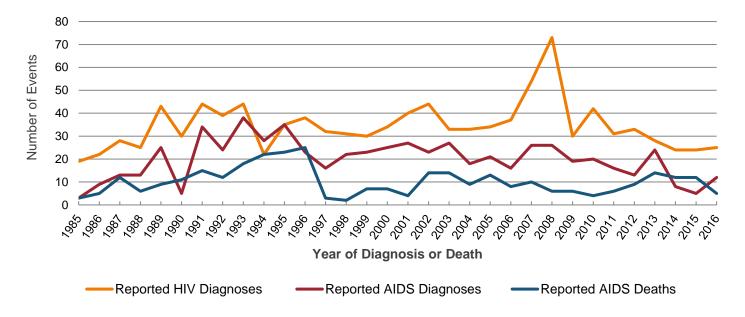
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### Section II - Trends 1985-2016

# Figure 1 – Trends in Reported HIV and AIDS Diagnoses and Deaths, 1985-2016, Reported through 6/30/2017

Reported HIV Cases with or without an AIDS Diagnosis (Reported HIV Diagnoses) by Year of HIV Diagnosis, Reported HIV Cases with an AIDS Diagnosis (Reported AIDS Diagnoses) by Year of AIDS Diagnosis, and Reported HIV Cases with an AIDS Diagnosis Reported to have Died of Any Cause (Reported AIDS Deaths) by Year of Death, from 1985 through 2016 as Reported through 6/30/2017



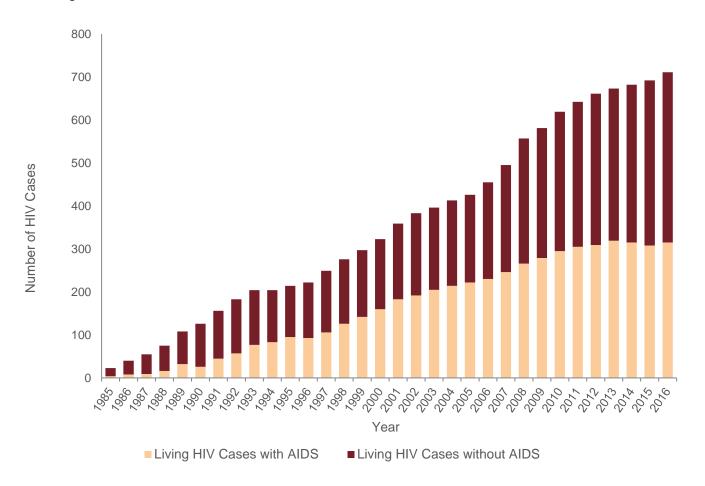
During the 2007-2008 transition to name-based reporting, many HIV cases were reported by a recent HIV diagnosis and not by their earliest HIV diagnosis, resulting in an artificial upward trend in HIV diagnoses during the period 2001-2008.

YEAR OF DIAGNOSIS OR DEATH	REPORTED HIV DIAGNOSES	REPORTED AIDS DIAGNOSES	REPORTED AIDS DEATHS	YEAR OF DIAGNOSIS OR DEATH	REPORTED HIV DIAGNOSES	REPORTED AIDS DIAGNOSES	REPORTED AIDS DEATHS
<1985	9	5	1	2001	40	27	4
1985	19	3	3	2002	44	23	14
1986	22	9	5	2003	33	27	14
1987	28	13	12	2004	33	18	9
1988	25	13	6	2005	34	21	13
1989	43	25	9	2006	37	16	8
1990	30	5	11	2007	54	26	10
1991	44	34	15	2008	73	26	6
1992	39	24	12	2009	30	19	6
1993	44	38	18	2010	42	20	4
1994	22	28	22	2011	31	16	6
1995	35	35	23	2012	33	13	9
1996	38	23	25	2013	28	24	14
1997	32	16	3	2014	24	8	12
1998	31	22	2	2015*	24	5	12
1999	30	23	7	2016*	25	12	5
2000	34	25	7	TOTAL	1,110	642	327

<sup>\*2015-2016</sup> reported AIDS deaths are preliminary.

### Figure 2 – Trends in Living HIV Cases, 1985-2016, Reported through 6/30/2017

Reported HIV Cases with or without an AIDS Diagnosis and Not Reported to have Died as of December 31st of Each Year (Living HIV Cases without AIDS, Living HIV Cases with AIDS, and Total Living HIV Cases) from 1985 through 2016, as Reported through 6/30/2017

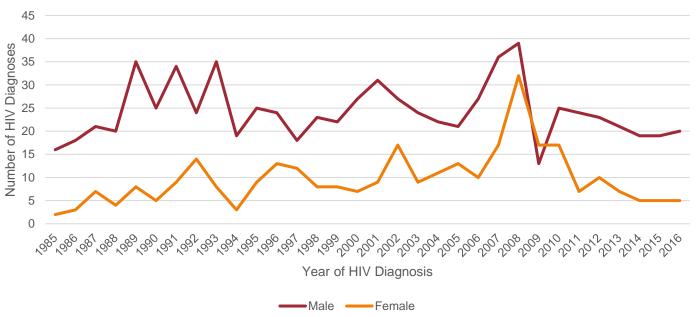


YEAR	LIVING HIV CASES WITHOUT AIDS	LIVING HIV CASES WITH AIDS	TOTAL LIVING HIV CASES	YEAR	LIVING HIV CASES WITHOUT AIDS	LIVING HIV CASES WITH AIDS	TOTAL LIVING HIV CASES
1985	19	4	23	2001	176	183	359
1986	32	8	40	2002	191	192	383
1987	46	9	55	2003	191	205	396
1988	59	16	75	2004	199	214	413
1989	76	32	108	2005	204	222	426
1990	100	26	126	2006	225	230	455
1991	111	45	156	2007	249	246	495
1992	126	57	183	2008	291	266	557
1993	127	77	204	2009	302	279	581
1994	121	83	204	2010	324	295	619
1995	119	95	214	2011	337	305	642
1996	129	93	222	2012	352	309	661
1997	143	106	249	2013	354	319	673
1998	150	126	276	2014	367	315	682
1999	155	142	297	2015	384	308	692
2000	163	160	323	2016	396	315	711

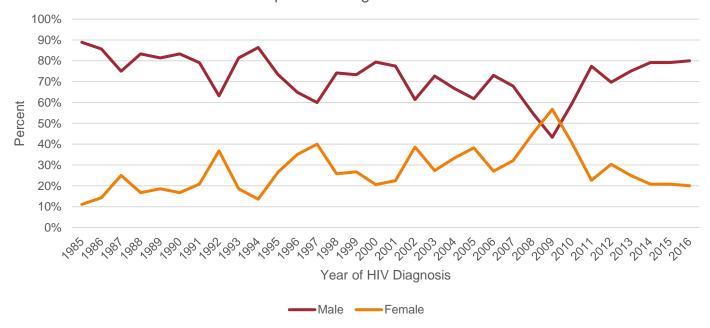
# Figure 3 – Trends in Adult/Adolescent Reported HIV Diagnoses by Sex at Birth, 1985-2016, Reported through 6/30/2017

Number and Percent by Sex at Birth of Adult/Adolescent Reported HIV Cases, Age 13+ at HIV Diagnosis, with or without an AIDS Diagnosis (Adult/Adolescent Reported HIV Diagnoses) by Year of HIV Diagnosis from 1985 through 2016, as Reported through 6/30/2017





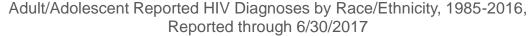
## Adult/Adolescent Reported HIV Diagnoses by Sex at Birth, 1985-2016, Reported through 6/30/2017

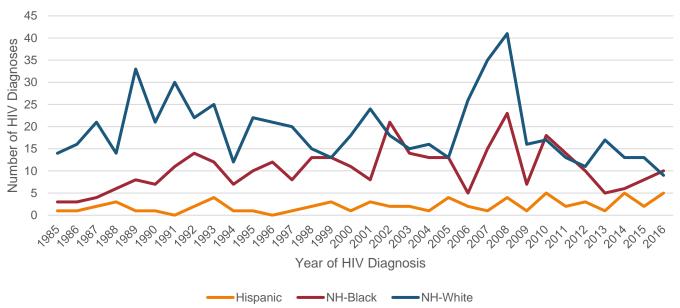


		ADULT/ADOLESC	ENT REPORTED HIV DIA	AGNOSES	
VEAR OF HIV DIA QUODIO			SEX AT BIR	тн	
YEAR OF HIV DIAGNOSIS	No.	Male	Female		
		No.	%	No.	%
<1985	9	9	100.0%	0	0.0%
1985	18	16	88.9%	2	11.1%
1986	21	18	85.7%	3	14.3%
1987	28	21	75.0%	7	25.0%
1988	24	20	83.3%	4	16.7%
1989	43	35	81.4%	8	18.6%
1990	30	25	83.3%	5	16.7%
1991	43	34	79.1%	9	20.9%
1992	38	24	63.2%	14	36.8%
1993	43	35	81.4%	8	18.6%
1994	22	19	86.4%	3	13.6%
1995	34	25	73.5%	9	26.5%
1996	37	24	64.9%	13	35.1%
1997	30	18	60.0%	12	40.0%
1998	31	23	74.2%	8	25.8%
1999	30	22	73.3%	8	26.7%
2000	34	27	79.4%	7	20.6%
2001	40	31	77.5%	9	22.5%
2002	44	27	61.4%	17	38.6%
2003	33	24	72.7%	9	27.3%
2004	33	22	66.7%	11	33.3%
2005	34	21	61.8%	13	38.2%
2006	37	27	73.0%	10	27.0%
2007	53	36	67.9%	17	32.1%
2008	71	39	54.9%	32	45.1%
2009	30	13	43.3%	17	56.7%
2010	42	25	59.5%	17	40.5%
2011	31	24	77.4%	7	22.6%
2012	33	23	69.7%	10	30.3%
2013	28	21	75.0%	7	25.0%
2014	24	19	79.2%	5	20.8%
2015	24	19	79.2%	5	20.8%
2016	25	20	80.0%	5	20.0%
TOTAL	1,097	786	71.6%	311	28.4%

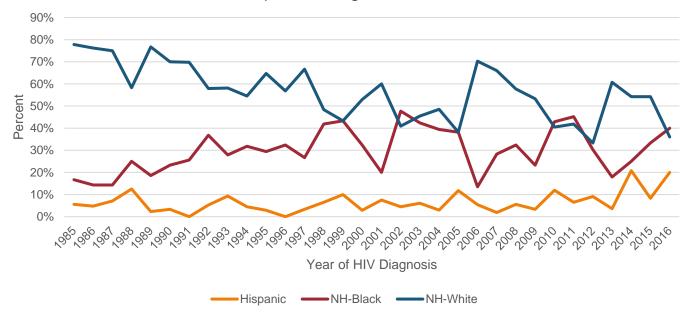
# Figure 4 – Trends in Adult/Adolescent Reported HIV Diagnoses by Race/Ethnicity, 1985-2016, Reported through 6/30/2017

Number and Percent by Race/Ethnicity of Adult/Adolescent Reported HIV Cases, Age 13+ at HIV Diagnosis, with or without an AIDS Diagnosis (Adult/Adolescent Reported HIV Diagnoses) by Year of HIV Diagnosis from 1985 through 2016, as Reported through 6/30/2017





## Adult/Adolescent Reported HIV Diagnoses by Race/Ethnicity, 1985-2016, Reported through 6/30/2017

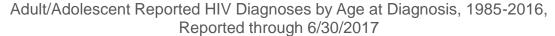


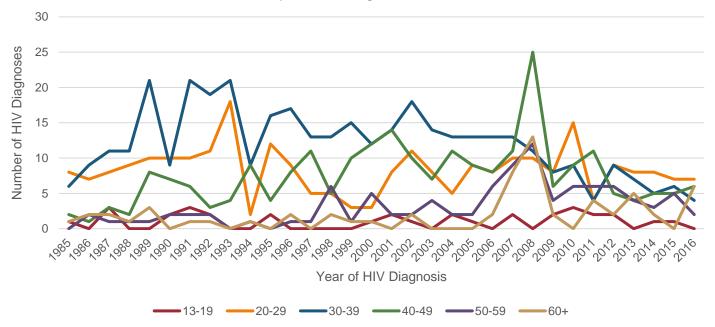
Non-Hispanic Other race not shown

			ADULT/ADOI	ESCENT REPOR	TED HIV DIA	AGNOSES								
		RACE/ETHNICITY												
YEAR OF HIV DIAGNOSIS	No.	Hispa	nic	Non-Hispan only	•	Non-Hispan only	•	Non-Hispar Rac						
DIAGNOSIS		No.	%	No.	%	No.	%	No.	%					
<1985	9	0	0.0%	3	33.3%	5	55.6%	1	11.1%					
1985	18	1	5.6%	3	16.7%	14	77.8%	0	0.0%					
1986	21	1	4.8%	3	14.3%	16	76.2%	1	4.8%					
1987	28	2	7.1%	4	14.3%	21	75.0%	1	3.6%					
1988	24	3	12.5%	6	25.0%	14	58.3%	1	4.2%					
1989	43	1	2.3%	8	18.6%	33	76.7%	1	2.3%					
1990	30	1	3.3%	7	23.3%	21	70.0%	1	3.3%					
1991	43	0	0.0%	11	25.6%	30	69.8%	2	4.7%					
1992	38	2	5.3%	14	36.8%	22	57.9%	0	0.0%					
1993	43	4	9.3%	12	27.9%	25	58.1%	2	4.7%					
1994	22	1	4.5%	7	31.8%	12	54.5%	2	9.1%					
1995	34	1	2.9%	10	29.4%	22	64.7%	1	2.9%					
1996	37	0	0.0%	12	32.4%	21	56.8%	4	10.8%					
1997	30	1	3.3%	8	26.7%	20	66.7%	1	3.3%					
1998	31	2	6.5%	13	41.9%	15	48.4%	1	3.2%					
1999	30	3	10.0%	13	43.3%	13	43.3%	1	3.3%					
2000	34	1	2.9%	11	32.4%	18	52.9%	4	11.8%					
2001	40	3	7.5%	8	20.0%	24	60.0%	5	12.5%					
2002	44	2	4.5%	21	47.7%	18	40.9%	3	6.8%					
2003	33	2	6.1%	14	42.4%	15	45.5%	2	6.1%					
2004	33	1	3.0%	13	39.4%	16	48.5%	3	9.1%					
2005	34	4	11.8%	13	38.2%	13	38.2%	4	11.8%					
2006	37	2	5.4%	5	13.5%	26	70.3%	4	10.8%					
2007	53	1	1.9%	15	28.3%	35	66.0%	2	3.8%					
2008	71	4	5.6%	23	32.4%	41	57.7%	3	4.2%					
2009	30	1	3.3%	7	23.3%	16	53.3%	6	20.0%					
2010	42	5	11.9%	18	42.9%	17	40.5%	2	4.8%					
2011	31	2	6.5%	14	45.2%	13	41.9%	2	6.5%					
2012	33	3	9.1%	10	30.3%	11	33.3%	9	27.3%					
2013	28	1	3.6%	5	17.9%	17	60.7%	5	17.9%					
2014	24	5	20.8%	6	25.0%	13	54.2%	0	0.0%					
2015	24	2	8.3%	8	33.3%	13	54.2%	1	4.2%					
2016	25	5	20.0%	10	40.0%	9	36.0%	1	4.0%					
TOTAL	1,097	67	6.1%	335	30.5%	619	56.4%	76	6.9%					

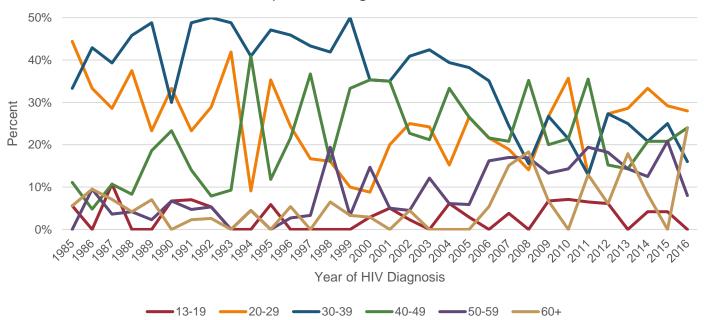
# Figure 5 – Trends in Adult/Adolescent Reported HIV Diagnoses by Age at Diagnosis, 1985-2016, Reported through 6/30/2017

Number and Percent by Age at HIV Diagnosis of Adult/Adolescent Reported HIV Cases, Age 13+ at HIV Diagnosis, with or without an AIDS Diagnosis (Adult/Adolescent Reported HIV Diagnoses) by Year of HIV Diagnosis from 1985 through 2016, as Reported through 6/30/2017





## Adult/Adolescent Reported HIV Diagnoses by Age at Diagnosis, 1985-2016, Reported through 6/30/2017

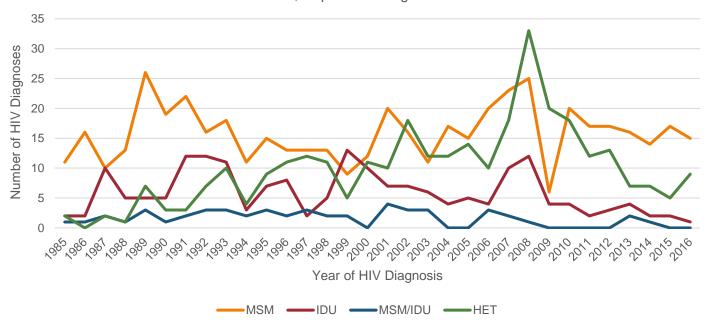


					ADULT/A	OOLESCEN	T REPORTI	ED <b>HIV D</b> I	AGNOSES					
YEAR OF HIV						Α	GE AT <b>HIV</b>	DIAGNOS	ıs					
DIAGNOSIS	No.	Age '	Age 13-19		Age 20-29		Age 30-39		Age 40-49		Age 50-59		Age 60+	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
<1985	9	0	0.0%	4	44.4%	4	44.4%	1	11.1%	0	0.0%	0	0.0%	
1985	18	1	5.6%	8	44.4%	6	33.3%	2	11.1%	0	0.0%	1	5.6%	
1986	21	0	0.0%	7	33.3%	9	42.9%	1	4.8%	2	9.5%	2	9.5%	
1987	28	3	10.7%	8	28.6%	11	39.3%	3	10.7%	1	3.6%	2	7.1%	
1988	24	0	0.0%	9	37.5%	11	45.8%	2	8.3%	1	4.2%	1	4.2%	
1989	43	0	0.0%	10	23.3%	21	48.8%	8	18.6%	1	2.3%	3	7.0%	
1990	30	2	6.7%	10	33.3%	9	30.0%	7	23.3%	2	6.7%	0	0.0%	
1991	43	3	7.0%	10	23.3%	21	48.8%	6	14.0%	2	4.7%	1	2.3%	
1992	38	2	5.3%	11	28.9%	19	50.0%	3	7.9%	2	5.3%	1	2.6%	
1993	43	0	0.0%	18	41.9%	21	48.8%	4	9.3%	0	0.0%	0	0.0%	
1994	22	0	0.0%	2	9.1%	9	40.9%	9	40.9%	1	4.5%	1	4.5%	
1995	34	2	5.9%	12	35.3%	16	47.1%	4	11.8%	0	0.0%	0	0.0%	
1996	37	0	0.0%	9	24.3%	17	45.9%	8	21.6%	1	2.7%	2	5.4%	
1997	30	0	0.0%	5	16.7%	13	43.3%	11	36.7%	1	3.3%	0	0.0%	
1998	31	0	0.0%	5	16.1%	13	41.9%	5	16.1%	6	19.4%	2	6.5%	
1999	30	0	0.0%	3	10.0%	15	50.0%	10	33.3%	1	3.3%	1	3.3%	
2000	34	1	2.9%	3	8.8%	12	35.3%	12	35.3%	5	14.7%	1	2.9%	
2001	40	2	5.0%	8	20.0%	14	35.0%	14	35.0%	2	5.0%	0	0.0%	
2002	44	1	2.3%	11	25.0%	18	40.9%	10	22.7%	2	4.5%	2	4.5%	
2003	33	0	0.0%	8	24.2%	14	42.4%	7	21.2%	4	12.1%	0	0.0%	
2004	33	2	6.1%	5	15.2%	13	39.4%	11	33.3%	2	6.1%	0	0.0%	
2005	34	1	2.9%	9	26.5%	13	38.2%	9	26.5%	2	5.9%	0	0.0%	
2006	37	0	0.0%	8	21.6%	13	35.1%	8	21.6%	6	16.2%	2	5.4%	
2007	53	2	3.8%	10	18.9%	13	24.5%	11	20.8%	9	17.0%	8	15.1%	
2008	71	0	0.0%	10	14.1%	11	15.5%	25	35.2%	12	16.9%	13	18.3%	
2009	30	2	6.7%	8	26.7%	8	26.7%	6	20.0%	4	13.3%	2	6.7%	
2010	42	3	7.1%	15	35.7%	9	21.4%	9	21.4%	6	14.3%	0	0.0%	
2011	31	2	6.5%	4	12.9%	4	12.9%	11	35.5%	6	19.4%	4	12.9%	
2012	33	2	6.1%	9	27.3%	9	27.3%	5	15.2%	6	18.2%	2	6.1%	
2013	28	0	0.0%	8	28.6%	7	25.0%	4	14.3%	4	14.3%		17.9%	
2014	24	1	4.2%	8	33.3%	5	20.8%	5	20.8%	3	12.5%	2	8.3%	
2015	24	1	4.2%	7	29.2%	6	25.0%	5	20.8%	5	20.8%	0	0.0%	
2016	25	0	0.0%	7	28.0%	4	16.0%	6	24.0%	2	8.0%	6	24.0%	
TOTAL	1,097	33	3.0%	269	24.5%	388	35.4%	242	22.1%	101	9.2%	64	5.8%	

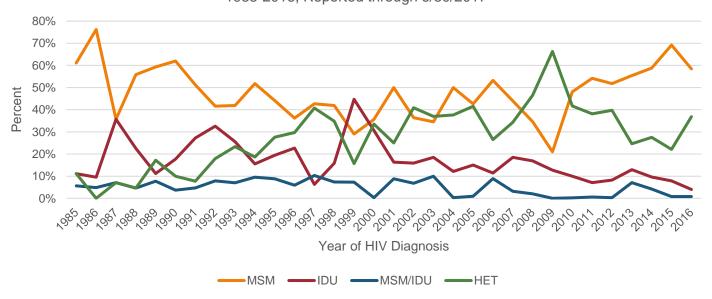
# Figure 6 – Trends in Adult/Adolescent Reported HIV Diagnoses by Estimated Exposure Category, 1985-2016, Reported through 6/30/2017

Number and Percent by Estimated Exposure Category§ of Adult/Adolescent Reported HIV Cases, Age 13+ at HIV Diagnosis, with or without an AIDS Diagnosis (Adult/Adolescent Reported HIV Diagnoses) by Year of HIV Diagnosis from 1985 through 2016, as Reported through 6/30/2017





Adult/Adolescent Reported HIV Diagnoses by Estimated Exposure Category, 1985-2016, Reported through 6/30/2017



Other Exposure Category not shown

§ Multiple imputation was used to estimate and adjust for missing transmission category.

V					Adult/Ad	OLESCENT I	REPORTED	HIV DIAGN	OSES			
YEAR OF		% with No				ESTIMA	TED EXPO	SURE CATE	GORY <sup>§</sup>			
HIV Diagnosis	No.**	Reported	MS	SM .	ID	U	MSM	/IDU	HE	ΞT	Other Ex	posure
DIAGNOSIS		Exposure* -	No.	%	No.	%	No.	%	No.	%	No.	%
<1985	9	11.1%	6	68.9%	1	12.2%	1	11.1%	1	7.8%	0	0.0%
1985	18	0.0%	11	61.1%	2	11.1%	1	5.6%	2	11.1%	2	11.1%
1986	21	0.0%	16	76.2%	2	9.5%	1	4.8%	0	0.0%	2	9.5%
1987	28	0.0%	10	35.7%	10	35.7%	2	7.1%	2	7.1%	4	14.3%
1988	24	4.2%	13	55.8%	5	22.5%	1	4.6%	1	4.6%	3	12.5%
1989	43	9.3%	26	59.3%	5	11.2%	3	7.7%	7	17.2%	2	4.7%
1990	30	6.7%	19	62.0%	5	17.7%	1	3.7%	3	10.0%	2	6.7%
1991	43	2.3%	22	51.2%	12	27.2%	2	4.7%	3	7.7%	4	9.3%
1992	38	7.9%	16	41.6%	12	32.6%	3	7.9%	7	17.9%	0	0.0%
1993	43	0.0%	18	41.9%	11	25.6%	3	7.0%	10	23.3%	1	2.3%
1994	22	4.5%	11	51.8%	3	15.5%	2	9.5%	4	18.6%	1	4.5%
1995	34	2.9%	15	44.1%	7	19.4%	3	8.8%	9	27.6%	0	0.0%
1996	37	8.1%	13	36.2%	8	22.7%	2	5.9%	11	29.7%	2	5.4%
1997	30	6.7%	13	42.7%	2	6.3%	3	10.3%	12	40.7%	0	0.0%
1998	31	6.5%	13	41.9%	5	15.8%	2	7.4%	11	34.8%	0	0.0%
1999	30	16.7%	9	29.0%	13	44.7%	2	7.3%	5	15.7%	1	3.3%
2000	34	8.8%	12	35.6%	10	30.6%	0	0.3%	11	33.5%	0	0.0%
2001	40	17.5%	20	50.0%	7	16.3%	4	8.8%	10	25.0%	0	0.0%
2002	44	18.2%	16	36.4%	7	15.9%	3	6.8%	18	40.9%	0	0.0%
2003	33	6.1%	11	34.5%	6	18.5%	3	10.0%	12	37.0%	0	0.0%
2004	33	12.1%	17	50.0%	4	12.1%	0	0.3%	12	37.6%	0	0.0%
2005	34	29.4%	15	42.6%	5	15.0%	0	0.9%	14	41.5%	0	0.0%
2006	37	18.9%	20	53.2%	4	11.4%	3	8.9%	10	26.5%	0	0.0%
2007	53	47.2%	23	44.0%	10	18.5%	2	3.2%	18	34.3%	0	0.0%
2008	71	57.7%	25	34.6%	12	16.9%	1	2.0%	33	46.5%	0	0.0%
2009	30	50.0%	6	21.0%	4	12.7%	0	0.0%	20	66.3%	0	0.0%
2010	42	38.1%	20	48.1%	4	10.0%	0	0.2%	18	41.7%	0	0.0%
2011	31	38.7%	17	54.2%	2	7.1%	0	0.6%	12	38.1%	0	0.0%
2012	33	21.2%	17	51.8%	3	8.2%	0	0.3%	13	39.7%	0	0.0%
2013	28	21.4%	16	55.4%	4	12.9%	2	7.1%	7	24.6%	0	0.0%
2014	24	16.7%	14	58.8%	2	9.6%	1	4.2%	7	27.5%	0	0.0%
2015	24	29.2%	17	69.2%	2	7.9%	0	0.8%	5	22.1%	0	0.0%
2016	25	28.0%	15	58.4%	1	4.0%	0	0.8%	9	36.8%	0	0.0%
TOTAL	1,097	18.9%	510	46.5%	191	17.4%	54	4.9%	318	29.0%	24	2.2%

<sup>§</sup> Multiple imputation was used to estimate and adjust for missing transmission category.

<sup>\*</sup>Percent with no reported exposure prior to multiple imputation adjustment.

<sup>\*\*</sup> Discrepancies in the table between total HIV diagnoses and the sums by exposure category are due to less than 1% of cases missing transmission category after multiple imputation.

### Section III – Adult/Adolescent Cases by Jurisdiction

Table 1 – Adult/Adolescent HIV Diagnoses during 2016, Linked to Care, Late Diagnosis, and First CD4 Test Result by Jurisdiction of Residence at HIV Diagnosis, Reported through 6/30/2017

	ADULT/ADOLESCENT REPORTED HIV DIAGNOSES										
JURISDICTION OF RESIDENCE AT HIV DIAGNOSIS	POPULATION AGE 13+	No.	% of	Rate -	Linked to Care		Linked to Care Late HIV Diagnoses		04 Test sult		
	AGE 101	NO.	Total	Rate	% 1 mo.	% 3 mo.	%	%	Median Count		
Allegany	63,216	2	8.0%	3.2	***	***	***	***	***		
Frederick	206,845	17	68.0%	8.2	82.4%	94.1%	***	94.1%	437		
Garrett	25,600	0	0.0%	0.0							
Washington	126,707	6	24.0%	4.7	***	***	***	***	***		
TOTAL	422,368	25	100.0%	5.9	88.0%	96.0%	20.0%	96.0%	376		

<sup>\*\*\*</sup> Data withheld due to low population counts and/or case counts

Jurisdiction of Residence at HIV Diagnosis: Jurisdiction of residence at time of initial HIV diagnosis.

**Population Age 13+:** Population age 13 years or older, estimate for 7/1/2016.

**Adult/Adolescent Reported HIV Diagnoses:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an initial HIV diagnosis during the specified year.

Rate: Number of adult/adolescent HIV diagnoses divided by the population age 13 years or older and multiplied by 100,000.

**Linked to Care:** Percent of adult/adolescent reported HIV diagnoses with a reported CD4 or viral load test performed less than or equal to 1 month or 3 months after their initial HIV diagnosis.

**Late HIV Diagnosis:** Percent of adult/adolescent reported HIV diagnoses with an initial AIDS diagnosis less than or equal to 12 months after their initial HIV diagnosis.

**First CD4 Test Result Percent:** Percent of adult/adolescent reported HIV diagnoses with the first CD4 test result reported within 12 months following the initial HIV diagnosis.

**First CD4 Test Result Median Count:** Median CD4 count (cells per microliter) of the first CD4 test result reported within 12 months following initial HIV diagnosis.

Table 2 – Adult/Adolescent AIDS Diagnoses during 2016, Mean Years from HIV Diagnosis and Percent Late HIV Diagnosis, by Jurisdiction of Residence at AIDS Diagnosis, Reported through 6/30/2017

		ADULT/ADOLESCENT REPORTED AIDS DIAGNOSES									
JURISDICTION OF RESIDENCE AT AIDS DIAGNOSIS	Population Age 13+	No.	% of Total	Rate	Mean Years from HIV Diagnosis	% Late HIV Diagnosis					
Allegany	63,216	3	25.0%	4.7	***	***					
Frederick	206,845	3	25.0%	1.5	***	***					
Garrett	25,600	0	0.0%	0.0							
Washington	126,707	6	50.0%	4.7	4.4	50.0%					
TOTAL	422,368	12	100.0%	2.8	2.8	58.3%					

<sup>\*\*\*</sup> Data withheld due to low population counts and/or case counts

Jurisdiction of Residence at AIDS Diagnosis: Jurisdiction of residence at time of initial AIDS diagnosis.

**Population Age 13+:** Population age 13 years or older, estimate for 7/1/2016.

**Adult/Adolescent Reported AIDS Diagnoses:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an initial AIDS diagnosis during the specified year.

Rate: Number of adult/adolescent AIDS diagnoses divided by the population age 13 years or older and multiplied by 100,000.

**Mean Years from HIV Diagnosis:** Mean number of years from initial HIV diagnosis to initial AIDS diagnosis for cases with a reported AIDS diagnosis.

**Percent Late HIV Diagnosis:** Percent of adult/adolescent reported AIDS diagnoses with an initial HIV diagnosis less than or equal to 12 months prior to their initial AIDS diagnosis.

Table 3 – Adult/Adolescent HIV Cases Alive on 12/31/2016, by Jurisdiction of Residence at Diagnosis, Reported through 6/30/2017

JURISDICTION OF RESIDENCE AT	Population	ADULT/ADOLESCENT LIVING HIV CASES WITHOUT AIDS			ADULT/ADOLESCENT LIVING HIV CASES WITH AIDS			ADULT/ADOLESCENT TOTAL LIVING HIV CASES			
DIAGNOSIS AG	Age 13+	No.	% of Total	Rate	No.	% of Total	Rate	No.	% of Total	Rate	Ratio (1 in X)
Allegany	63,216	37	9.5%	58.5	31	10.0%	49.0	68	9.7%	107.6	929
Frederick	206,845	176	45.0%	85.1	152	48.9%	73.5	328	46.7%	158.6	630
Garrett	25,600	5	1.3%	19.5	3	1.0%	11.7	8	1.1%	31.3	3,199
Washington	126,707	173	44.2%	136.5	125	40.2%	98.7	298	42.5%	235.2	425
TOTAL	422,368	391	100.0%	92.6	311	100.0%	73.6	702	100.0%	166.2	601

**Jurisdiction of Residence at Diagnosis:** Jurisdiction of residence at later time of initial HIV diagnosis or time of initial AIDS diagnosis.

**Population Age 13+:** Population greater than or equal to 13 years old, estimate for 7/1/2016.

**Adult/Adolescent Living HIV Cases without AIDS:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, without an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

**Adult/Adolescent Living HIV Cases with AIDS:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an AIDS diagnosis, and not reported to have died as of December 31<sup>st</sup> of the specified year.

**Adult/Adolescent Total Living HIV Cases:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

Rate: Number of adult/adolescent cases divided by the population age 13 years or older multiplied by 100,000.

Ratio (1 in X): Number of people for every 1 living HIV case in the population, or 1 living HIV case in every X number of people.

Table 4 – Adult/Adolescent HIV Cases Alive on 12/31/2016, by Jurisdiction of Residence at Diagnosis or Current Residence, Reported through 6/30/2017

		Adult/Adolescent Total Living HIV Cases									
JURISDICTION OF	POPULATION	R	esidence a	t Diagnosi	S		%				
RESIDENCE	AGE 13+	No.	% of Total	Rate	Ratio (1 in X)	No.	% of Total	Rate	Ratio (1 in X)	Change	
Allegany	63,216	68	9.7%	107.6	929	96	11.8%	151.9	658	41.2%	
Frederick	206,845	328	46.7%	158.6	630	374	45.8%	180.8	553	14.0%	
Garrett	25,600	8	1.1%	31.3	3,199	13	1.6%	50.8	1,969	62.5%	
Washington	126,707	298	42.5%	235.2	425	333	40.8%	262.8	380	11.7%	
TOTAL	422,368	702	100.0%	166.2	601	816	100.0%	193.2	517	16.2%	

**Jurisdiction of Residence:** Jurisdiction of residence at diagnosis or current residence.

**Population Age 13+:** Population age 13 years or older, estimate for 7/1/2016.

**Adult/Adolescent Total Living HIV Cases:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

Residence at Diagnosis: Jurisdiction of residence at later time of initial HIV diagnosis or initial AIDS diagnosis.

Current Residence: Jurisdiction of residence from the most recent report since 1/1/2009.

Rate: Number of adult/adolescent cases divided by the population age 13 years or older multiplied by 100,000.

Ratio (1 in X): Number of people for every 1 living HIV case in the population, or 1 living HIV case in every X number of people.

**Percent Change:** The percent change in number of adult/adolescent total living HIV cases from residence at diagnosis to current residence.

Table 5 – CD4 Test Results during 2016 for Adult/Adolescent HIV Cases Alive on 12/31/2016, by Jurisdiction of Current Residence, Reported through 6/30/2017

	Adult/Adolescent Total Living HIV Cases										
JURISDICTION OF CURRENT		Recent CD4 Test Result									
RESIDENCE	No.	No. with Test	% with Test	Median Count	<200	200-349	350-499	500+			
Allegany	96	81	84.4%	641	4.9%	8.6%	18.5%	67.9%			
Frederick	374	259	69.3%	599	3.1%	13.5%	15.1%	68.3%			
Garrett	13	10	76.9%	692	0.0%	0.0%	20.0%	80.0%			
Washington	333	246	73.9%	641	10.6%	10.2%	11.8%	67.5%			
TOTAL	816	596	73.0%	627	6.4%	11.2%	14.3%	68.1%			

Jurisdiction of Current Residence: Jurisdiction of residence from the most recent report since 1/1/2009.

**Adult/Adolescent Total Living HIV Cases:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

Recent CD4 Test Result: The most recent CD4 test result measured in the specified year.

With Test: Number and percent of adult/adolescent total living HIV cases with a recent CD4 test result.

**Median Count:** Median CD4 count (cells per microliter), among adult/adolescent total living HIV cases, of the most recent CD4 test result measured in the specified year.

**CD4 Result Distribution (<200, 200-349, 350-499, 500+):** Percent of adult/adolescent living HIV cases with a recent CD4 test result distributed by the CD4 count results (cells per microliter).

Table 6 – Viral Load Test Results during 2016 for Adult/Adolescent HIV Cases Alive on 12/31/2016, by Jurisdiction of Current Residence, Reported through 6/30/2017

	ADULT/ADOLESCENT TOTAL LIVING HIV CASES								
JURISDICTION OF CURRENT RESIDENCE		Recent Viral Load Test Result							
	No.	No. with Test	% with Test	% Suppressed	Median Unsuppressed				
Allegany	96	78	81.3%	87.2%	10,112				
Frederick	374	263	70.3%	90.9%	26,470				
Garrett	13	10	76.9%	90.0%	7,200				
Washington	333	246	73.9%	83.3%	2,871				
TOTAL	816	597	73.2%	87.3%	8,140				

**Adult/Adolescent Total Living HIV Cases:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

Jurisdiction of Current Residence: Jurisdiction of residence from the most recent report since 1/1/2009.

Recent Viral Load Test Result: The most recent viral load test result measured in the specified year.

With Test: Number and percent of adult/adolescent total living HIV cases with a recent viral load test result.

**Percent Suppressed:** Percent of adult/adolescent total living HIV cases with a recent viral load test result measured in the specified year of less than 200 copies per milliliter.

**Median Unsuppressed:** Median unsuppressed viral load (copies per milliliter) among adult/adolescent total living HIV cases with the most recent viral load test result measured in the specified year of 200 copies per milliliter or greater.

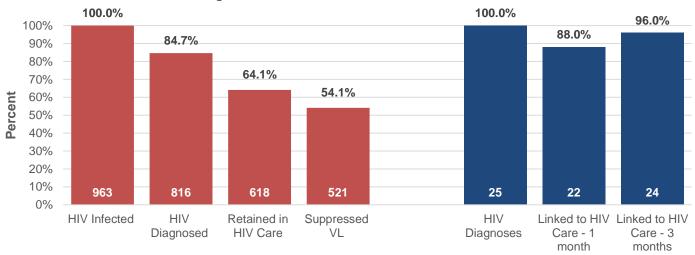
### Section IV – Continuum of Care Cascades

In their 2011 article in Clinical Infectious Diseases, Gardner et al.<sup>1</sup> utilize a continuum of care "cascade" to illustrate estimates of the number of persons living with HIV who belong to each of the stages of engagement in HIV care.

# Figure 7 – Prevalence-Based Estimated Adult/Adolescent 2016 HIV Continuum of Care Cascades, Current Western Region Residents, Reported through 6/30/2017

The prevalence-based Western Region Engagement in HIV Care Cascade (below) uses the most recent Centers for Disease Control and Prevention (CDC) estimate of the number of undiagnosed persons in Maryland (15.3%)<sup>2</sup> to generate an estimated number of HIV infected persons currently residing in the Western Region of Maryland. It then uses Maryland surveillance data to describe the number and percentage of persons living with HIV in the region on 12/31/2016 and the number and percentage of new HIV diagnoses in 2016 who belong to each of the stages of engagement in HIV care.





**Engagement in HIV Care** 

Continuum of Care Stage	Living I	HV Cases	Continuum of Caro Stage	New Diagnoses		
Continuum of Care Stage	Number	Percentage	Percentage Continuum of Care Stage Numb		Percentage	
HIV Infected	963	100.0%	New HIV Diagnoses	25	100.0%	
HIV Diagnosed	816	84.7%	Linked to HIV Care – 1 Month	22	88.0%	
Retained in HIV Care	618	64.1%	Linked to HIV Care – 3 Months	24	96.0%	
Suppressed VL	521	54.1%				

HIV Infected: HIV Diagnosed divided by one minus the estimate of undiagnosed HIV infections (15.3%) in Maryland.

HIV Diagnosed: Adult/adolescent total living HIV cases as of December 31st of the specified year.

**Retained in HIV Care:** HIV Diagnosed with a reported CD4 or viral load test result performed during the specified year. **Suppressed Viral Load:** HIV Diagnosed with the most recent viral load measured in the specified year of less than 200 copies per milliliter.

**New HIV Diagnoses:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an initial HIV diagnosis during the specified year.

**Linked to HIV Care – 1 month:** Adult/adolescent reported HIV diagnoses with a reported CD4 or viral load test performed less than or equal to 1 month after their initial HIV diagnosis.

**Linked to HIV Care – 3 months:** Number of adult/adolescent reported HIV diagnoses with a reported CD4 or viral load test performed less than or equal to 3 months after their initial HIV diagnosis.

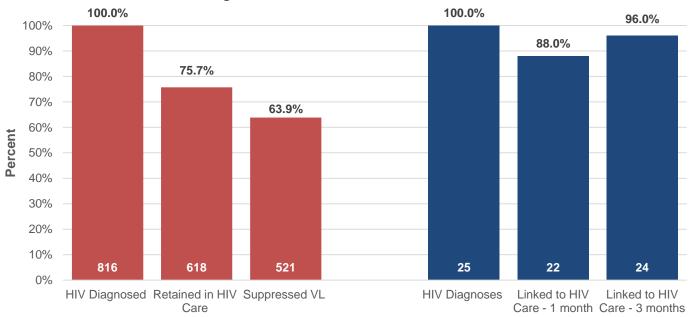
<sup>&</sup>lt;sup>1</sup> Gardner et al, "The Spectrum of Engagement in HIV Care and its Relevance to Test-and-Treat Strategies for Prevention of HIV Infection." Clin Infect Dis. 2011; 52 (6): 793-800.

<sup>&</sup>lt;sup>2</sup>Centers for Disease Control and Prevention. Monitoring selected national HIV prevention and care objectives by using HIV surveillance data—United States and 6 dependent areas, 2015. HIV Surveillance Supplemental Report 2017;22(No. 2). http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html. Published July 2017.

# Figure 8 – Diagnosis-Based Estimated Adult/Adolescent 2016 HIV Continuum of Care Cascades, Current Western Region Residents, Reported through 6/30/2017

The diagnosis-based Western Region Engagement in HIV Care Cascade (below) uses Maryland surveillance data for current Western Region residents to describe the number and percentage of persons living with HIV in the region on 12/31/2016 and the number and percentage of new HIV diagnoses in 2016 who belong to each of the stages of engagement in HIV care.





**Engagement in HIV Care** 

Continuum of Care Stage	Living H	IIV Cases	Continuum of Care Stage	New Diagnoses		
Number 1		Percentage	Continuum of Care Stage	Number	Percentage	
HIV Diagnosed	816	100.0%	New HIV Diagnoses	25	100.0%	
Retained in HIV Care	618	75.7%	Linked to HIV Care – 1 Month	22	88.0%	
Suppressed VL	521	63.9%	Linked to HIV Care – 3 Months	24	96.0%	

**HIV Diagnosed:** Adult/adolescent total living HIV cases as of December 31<sup>st</sup> of the specified year with a recent address in Maryland between 2009 and 2016.

Retained in HIV Care: HIV Diagnosed with a reported CD4 or viral load test result performed during the specified year.

**Suppressed Viral Load:** HIV Diagnosed with the most recent viral load measured in the specified year of less than 200 copies per milliliter.

**New HIV Diagnoses:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an initial HIV diagnosis during the specified year.

**Linked to HIV Care – 1 month:** Adult/adolescent reported HIV diagnoses with a reported CD4 or viral load test performed less than or equal to 1 month after their initial HIV diagnosis.

**Linked to HIV Care – 3 months:** Number of adult/adolescent reported HIV diagnoses with a reported CD4 or viral load test performed less than or equal to 3 months after their initial HIV diagnosis.

### Section V – Cases by Age

Table 7 – HIV Diagnoses during 2016, Linked to Care, Late Diagnosis, and First CD4 Test Result by Age at HIV Diagnosis, Reported through 6/30/2017

					REPORTE	D HIV DIAG	NOSES		
AGE AT HIV DIAGNOSIS	POPULATION	No.	% of	Rate	Linked t	o Care	Late HIV Diagnoses	First CD4 Test Resul	
DIAGNOSIS		NO.	Total	Rate	% 1 mo.	% 3 mo.	%	%	Median Count
<5 (Pediatric)	28,099	0	0.0%	0.0					
5-12 (Pediatric)	48,971	0	0.0%	0.0					
13-19	45,814	0	0.0%	0.0					
20-29	63,676	7	28.0%	11.0	71.4%	85.7%	0.0%	85.7%	402
30-39	62,209	4	16.0%	6.4	***	***	***	***	***
40-49	66,842	6	24.0%	9.0	100.0%	100.0%	***	100.0%	286
50-59	74,223	2	8.0%	2.7	***	***	***	***	***
60+	109,604	6	24.0%	5.5	100.0%	100.0%	***	100.0%	288
TOTAL	499,438	25	100.0%	5.0	88.0%	96.0%	20.0%	96.0%	376

<sup>\*\*\*</sup> Data withheld due to low population counts and/or case counts

**Age at HIV Diagnosis:** Age group at time of initial HIV diagnosis.

**Population:** Population estimate for 7/1/2016.

Reported HIV Diagnoses: Reported HIV diagnoses with an initial HIV diagnosis during the specified year.

Rate: Number of HIV diagnoses divided by the population age 13 years or older and multiplied by 100,000.

**Linked to Care:** Percent of reported HIV diagnoses with a reported CD4 or viral load test performed less than or equal to 1 month or 3 months after their initial HIV diagnosis.

Late HIV Diagnosis: Percent of reported HIV diagnoses with an initial AIDS diagnosis less than or equal to 12 months after their initial HIV diagnosis.

**First CD4 Test Result Percent:** Percent of reported HIV diagnoses with the first CD4 test result reported within 12 months following the initial HIV diagnosis.

**First CD4 Test Result Median Count:** Median CD4 count (cells per microliter) of the first CD4 test result reported within 12 months following initial HIV diagnosis.

Table 8 – HIV Cases Alive on 12/31/2016, by Age on 12/31/2016, Reported through 6/30/2017

Age On			To	OTAL LIVING HIV CAS	ES	
12/31/2016	Population	No.	% of Total	% Living with AIDS	Rate	Ratio (1 in X)
<5	28,099	1	0.1%	0.0%	3.6	28,099
5-12	48,971	3	0.4%	0.0%	6.1	16,323
13-19	45,814	3	0.4%	33.3%	6.5	15,271
20-29	63,676	61	7.4%	24.6%	95.8	1,043
30-39	62,209	135	16.3%	39.3%	217.0	460
40-49	66,842	223	27.0%	53.4%	333.6	299
50-59	74,223	275	33.3%	61.1%	370.5	269
60+	109,604	125	15.1%	59.2%	114.0	876
TOTAL	499,438	826	100.0%	52.1%	165.4	604

**Age on [date]:** Age group of living cases on the specified date.

**Population:** Population estimate for 7/1/2016.

**Total Living HIV Cases:** Reported HIV diagnoses with or without an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

**Percent Living with AIDS:** The **p**ercent of reported HIV diagnoses with an AIDS diagnosis not reported to have died as of December 31<sup>st</sup> of the specified year.

Rate: Number of HIV cases divided by the population multiplied by 100,000.

Ratio (1 in X): Number of people for every 1 living HIV case in the population, or 1 living HIV case in every X number of people.

Table 9 – CD4 Test Results during 2016 for Adult/Adolescent HIV Cases Alive on 12/31/2016, by Age on 12/31/2016, Reported through 6/30/2017

		ADULT/ADOLESCENT TOTAL LIVING HIV CASES										
AGE ON			Recent CD4 Test Results									
12/31/2016	No.	No. with Test	% with Test	Median Count	<200	200-349	350-499	500+				
13-19	0											
20-29	59	38	64.4%	754	2.6%	10.5%	5.3%	81.6%				
30-39	135	94	69.6%	683	7.4%	8.5%	10.6%	73.4%				
40-49	222	162	73.0%	573	9.9%	11.1%	16.7%	62.3%				
50-59	275	202	73.5%	641	4.5%	10.9%	14.4%	70.3%				
60+	125	100	80.0%	592	5.0%	15.0%	17.0%	63.0%				
TOTAL	816	596	73.0%	627	6.4%	11.2%	14.3%	68.1%				

Table 10 – Viral Load Test Results during 2016 for Adult/Adolescent HIV Cases Alive on 12/31/2016, by Age on 12/31/2016, Reported through 6/30/2017

		Adult/Ade	OLESCENT TOTAL LIVING	HIV CASES						
Age On		Recent Viral Load Test Result								
12/31/2016	No.	No. with Test	o. with Test % with Test		Median Unsuppressed					
13-19	0									
20-29	59	39	66.1%	84.6%	11,767					
30-39	135	100	74.1%	88.0%	23,021					
40-49	222	166	74.8%	83.1%	9,204					
50-59	275	199	72.4%	90.5%	3,176					
60+	125	93	74.4%	88.2%	7,465					
TOTAL	816	597	73.2%	87.3%	8,140					

Age on [date]: Age group of living cases on the specified date.

**Adult/Adolescent Total Living HIV Cases:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

Recent CD4 Test Result: The most recent CD4 test result measured in the specified year.

CD4 With Test: Number and percent of adult/adolescent total living HIV cases with a recent CD4 test result.

**Median Count:** Median CD4 count (cells per microliter), among adult/adolescent total living HIV cases, of the most recent CD4 test result measured in the specified year.

**CD4 Result Distribution (<200, 200-349, 350-499, 500+):** Percent of adult/adolescent living HIV cases with a recent CD4 test result distributed by the CD4 count results (cells per microliter).

Recent Viral Load Test Result: The most recent viral load test result measured in the specified year.

Viral Load With Test: Number and percent of adult/adolescent total living HIV cases with a recent viral load test result.

**Percent Suppressed:** Percent of adult/adolescent total living HIV cases with a recent viral load test result measured in the specified year of less than 200 copies per milliliter.

**Median Unsuppressed:** Median unsuppressed viral load (copies per milliliter) among adult/adolescent total living HIV cases with the most recent viral load test result measured in the specified year of 200 copies per milliliter or greater.

### Section VI – Adult/Adolescent Cases by Demographics

Table 11 – Adult/Adolescent HIV Diagnoses during 2016, Linked to Care, Late Diagnosis, and First CD4 Test Result by Sex at Birth, Race/Ethnicity, and Country of Birth, Reported through 6/30/2017

		ADULT/ADOLESCENT REPORTED HIV DIAGNOSES								
SEV AT RIDTU	POPULATION AGE 13+*	No.	% of Total	Rate -	Linked to Care		Late HIV Diagnoses	First CD4 Test Result		
	AGE 101	NO.			% 1 mo.	% 3 mo.	%	%	Median Count	
Male	211,256	20	80.0%	9.5	85.0%	95.0%	20.0%	95.0%	337	
Female	211,112	5	20.0%	2.4	***	***	***	***	***	
TOTAL	422,368	25	100.0%	5.9	88.0%	96.0%	20.0%	96.0%	376	

				ADULT/AD	OLESCENT F	REPORTED I	HIV DIAGNOSES		
RACE/ETHNICITY	POPULATION AGE 13+*	No.	% of	Rate	Linked	to Care	Late HIV Diagnoses	First CE Res	
	AGE 101	NO.	Total	raic	% 1 mo.	% 3 mo.	%	%	Median Count
Hispanic	23,119	5	20.0%	21.6	***	***	***	***	***
Non-Hispanic	399,249	20	80.0%	5.0	90.0%	100.0%	20.0%	100.0%	354
American Indian/Alaska Native, only	864	0	0.0%	0.0					
Asian, only	12,384	0	0.0%	0.0					
Black, only	37,444	10	40.0%	26.7	100.0%	100.0%	0.0%	100.0%	403
Native Hawaiian/Other Pacific Islander, only	217	0	0.0%	0.0					
White, only	341,539	9	36.0%	2.6	77.8%	100.0%	33.3%	100.0%	320
Multiracial/ Other	6,801	1	4.0%	14.7	***	***	***	***	***
Total	422,368	25	100.0%	5.9	88.0%	96.0%	20.0%	96.0%	376

				Adult/Ado	LESCENT RE	PORTED H	V DIAGNOSES		
Country of Birth	POPULATION AGE 13+**	No.	% of	Rate	Linked	to Care	Late HIV Diagnoses	First CD4 Test Result	
	AGE 104	NO.	Total	Rate	% 1 mo.	% 3 mo.	%	%	Median Count
United States	383,643	22	88.0%	5.7	86.4%	95.5%	22.7%	95.5%	370
Foreign-born	31,331	2	8.0%	6.4	***	***	***	***	***
Africa		2	8.0%		***	***	***	***	***
Asia		0	0.0%						
Caribbean		0	0.0%						
Central America		0	0.0%						
Other		0	0.0%						
Unknown		1	4.0%		100.0%	100.0%	0.0%	100.0%	382
TOTAL	414,974	25	100.0%	6.0	88.0%	96.0%	20.0%	96.0%	376

<sup>\*</sup> Population data by sex at birth, age, and race/ethnicity are from the 2016 U.S. Census population estimates

Population Age 13+: Population greater than or equal to 13 years old, estimate for 7/1/2016.

**Adult/Adolescent Reported HIV Diagnoses:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an initial HIV diagnosis during the specified year.

Rate: Number of adult/adolescent HIV diagnoses divided by the population age 13 years or older and multiplied by 100,000.

<sup>\*\*</sup> Population data by country of birth are from the 2015 American Community Survey

<sup>\*\*\*</sup> Data withheld due to low population and/or case counts

**Linked to Care:** Percent of adult/adolescent reported HIV diagnoses with a reported CD4 or viral load test performed less than or equal to 1 month or 3 months after their initial HIV diagnosis.

**Late HIV Diagnosis:** Percent of adult/adolescent reported HIV diagnoses with an initial AIDS diagnosis less than or equal to 12 months after their initial HIV diagnosis.

**First CD4 Test Result Percent:** Percent of adult/adolescent reported HIV diagnoses with the first CD4 test result reported within 12 months following the initial HIV diagnosis.

**First CD4 Test Result Median Count:** Median CD4 count (cells per microliter) of the first CD4 test result reported within 12 months following initial HIV diagnosis.

Table 12 – Adult/Adolescent Living HIV Cases Alive on 12/31/2016, by Sex at Birth, Race/Ethnicity, and Country of Birth, Reported through 6/30/2017

	POPULATION .		ADULT/ADO	LESCENT TOTAL LIVING	HIV CASES					
SEX AT BIRTH	AGE 13+	No.	% of Total	% Living with AIDS	Rate	Ratio (1 in X)				
Male	211,256	570	69.9%	52.6%	269.8	370				
Female	211,112	246	30.1%	51.2%	116.5	858				
TOTAL	422,368	816	100.0%	52.2%	193.2	517				

	POPULATION .		Adult/Adoi	LESCENT TOTAL LIVING	HIV CASES				
RACE/ETHNICITY	AGE 13+*	No.	% of Total	% Living with AIDS	Rate	Ratio (1 in X)			
Hispanic	23,119	58	7.1%	53.4%	250.9	398			
Non-Hispanic	399,249	758	92.9%	52.1%	189.9	526			
American Indian/Alaska Native, only	864	***	***	***	***	***			
Asian, only	12,384	7	0.9%	85.7%	56.5	1,769			
Black, only	37,444	279	34.2%	56.3%	745.1	134			
Native Hawaiian/ Other Pacific Islander, only	217	***	***	***	***	***			
White, only	341,539	390	47.8%	47.4%	114.2	875			
Multiracial/ Other	6,801	81	9.9%	56.8%	1,191.0	83			
TOTAL	422,368	816	100.0%	52.2%	193.2	517			

COUNTRY OF	POPULATION .		Adult/Ado	LESCENT TOTAL LIVING	HIV CASES	ASES				
BIRTH	AGE 13+**	No.	% of Total	% Living with AIDS	Rate	Ratio (1 in X)				
United States	383,643	709	86.9%	52.0%	184.8	541				
Foreign-born	31,331	60	7.4%	65.0%	191.5	522				
Africa		38	4.7%	63.2%						
Asia		6	0.7%	66.7%						
Caribbean		1	0.1%	100.0%						
Central America		11	1.3%	54.5%						
Other		4	0.5%	100.0%						
Unknown		47	5.8%	38.3%						
TOTAL	414,974	816	100.0%	52.2%	196.6	508				

<sup>\*</sup> Population data by sex at birth, age, and race/ethnicity are from the 2016 U.S. Census population estimates

Population Age 13+: Population greater than or equal to 13 years old, estimate for 7/1/2016.

**Adult/Adolescent Total Living HIV Cases:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

**Percent Living with AIDS:** The percent of reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an AIDS diagnosis, and not reported to have died as of December 31<sup>st</sup> of the specified year.

Rate: Number of adult/adolescent cases divided by the population age 13 years or older multiplied by 100,000.

Ratio (1 in X): Number of people for every 1 living HIV case in the population, or 1 living HIV case in every X number of people.

<sup>\*\*</sup> Population data by country of birth are from the 2015 American Community Survey

<sup>\*\*\*</sup> Data withheld due to low population and/or case counts

Table 13 – CD4 Test Results during 2016 for Adult/Adolescent HIV Cases Alive on 12/31/2016, by Sex at Birth, Race/Ethnicity and Country of Birth, Reported through 6/30/2017

			ADULT/A	DOLESCENT TO	TAL LIVING HI	V CASES					
SEX AT BIRTH				Recer	nt CD4 Test R	esult					
	No.	No. with Test	% with Test	Median Count	<200	200-349	350-499	500+			
Male	570	417	73.2%	603	6.0%	13.2%	15.1%	65.7%			
Female	246	179	72.8%	683	7.3%	6.7%	12.3%	73.7%			
TOTAL	816	596	73.0%	627	6.4%	11.2%	14.3%	68.1%			

		ADULT/ADOLESCENT TOTAL LIVING HIV CASES									
RACE/ETHNICITY		Recent CD4 Test Result									
	No.	No. with Test	% with Test	Median Count	<200	200-349	350-499	500+			
Hispanic	58	43	74.1%	519	11.6%	11.6%	18.6%	58.1%			
Non-Hispanic	758	553	73.0%	636	6.0%	11.2%	13.9%	68.9%			
American Indian/Alaska Native, only	***	***	***	***	***	***	***	***			
Asian, only	7	***	***	***	***	***	***	***			
Black, only	279	199	71.3%	561	6.0%	16.6%	16.6%	60.8%			
Native Hawaiian/Other Pacific Islander, only	***	***	***	***	***	***	***	***			
White, only	390	280	71.8%	670	4.6%	8.2%	12.1%	75.0%			
Multiracial/Other	81	73	90.1%	658	11.0%	8.2%	13.7%	67.1%			
TOTAL	816	596	73.0%	627	6.4%	11.2%	14.3%	68.1%			

		ADULT/ADOLESCENT TOTAL LIVING HIV CASES								
Country Of Birth				Recer	nt CD4 Test R	lesult				
	No.	No. with Test	% with Test	Median Count	<200	200-349	350-499	500+		
United States	709	528	74.5%	630	6.8%	11.2%	14.2%	67.8%		
Foreign-born	60	44	73.3%	567	2.3%	13.6%	13.6%	70.5%		
Africa	38	29	76.3%	573	0.0%	17.2%	6.9%	75.9%		
Asia	6	***	***	***	***	***	***	***		
Caribbean	1	***	***	***	***	***	***	***		
Central America	11	8	72.7%	577	0.0%	12.5%	25.0%	62.5%		
Other	4	***	***	***	***	***	***	***		
Unknown	47	24	51.1%	714	4.2%	8.3%	16.7%	70.8%		
Total	816	596	73.0%	627	6.4%	11.2%	14.3%	68.1%		

<sup>\*\*\*</sup> Data withheld due to low population and/or case counts

**Adult/Adolescent Total Living HIV Cases:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

**Recent CD4 Test Result:** The most recent CD4 test result measured in the specified year.

With Test: Number and percent of adult/adolescent total living HIV cases with a recent CD4 test result.

**Median Count:** Median CD4 count (cells per microliter), among adult/adolescent total living HIV cases, of the most recent CD4 test result measured in the specified year.

**CD4 Result Distribution (<200, 200-349, 350-499, 500+):** Percent of adult/adolescent living HIV cases with a recent CD4 test result distributed by the CD4 count results (cells per microliter).

Table 14 – Viral Load Test Results during 2016 for Adult/Adolescent HIV Cases Alive on 12/31/2016, by Sex at Birth, Race/Ethnicity and Country of Birth, Reported through 6/30/2017

	ADULT/ADOLESCENT TOTAL LIVING HIV CASES							
SEX AT BIRTH			Recent Viral Lo	ad Test Result				
	No.	No. with Test	% with Test	% Suppressed	Median Unsuppressed			
Male	570	416	73.0%	87.5%	11,340			
Female	246	181	73.6%	86.7%	2,996			
TOTAL	816	597	73.2%	87.3%	8,140			

	ADULT/ADOLESCENT TOTAL LIVING HIV CASES								
RACE/ETHNICITY		Recent Viral Load Test Result							
10.02.2.1111.0.1.1	No.	No. with Test	% with Test	% Suppressed	Median Unsuppressed				
Hispanic	58	44	75.9%	88.6%	5,828				
Non-Hispanic	758	553	73.0%	87.2%	9,724				
American Indian/Alaska Native, only	***	***	***	***	***				
Asian, only	7	***	***	***	***				
Black, only	279	202	72.4%	88.1%	15,890				
Native Hawaiian/Other Pacific Islander, only	***	***	***	***	***				
White, only	390	275	70.5%	86.9%	7,838				
Multiracial/Other	81	72	88.9%	84.7%	4,646				
TOTAL	816	597	73.2%	87.3%	8,140				

		Adult/Adoi	LESCENT TOTAL LIVING	HIV CASES				
COUNTRY OF BIRTH		Recent Viral Load Test Result						
	No.	No. with Test	% with Test	% Suppressed	Median Unsuppressed			
United States	709	530	74.8%	86.4%	9,031			
Foreign-born	60	45	75.0%	95.6%	11,240			
Africa	38	29	76.3%	96.6%	3,120			
Asia	6	***	***	***	***			
Caribbean	1	***	***	***	***			
Central America	11	8	72.7%	100.0%				
Other	4	***	***	***	***			
Unknown	47	22	46.8%	90.9%	1,254			
TOTAL	816	597	73.2%	87.3%	8,140			

<sup>\*\*\*</sup> Data withheld due to low population and/or case counts

**Adult/Adolescent Total Living HIV Cases:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

Recent Viral Load Test Result: The most recent viral load test result measured in the specified year.

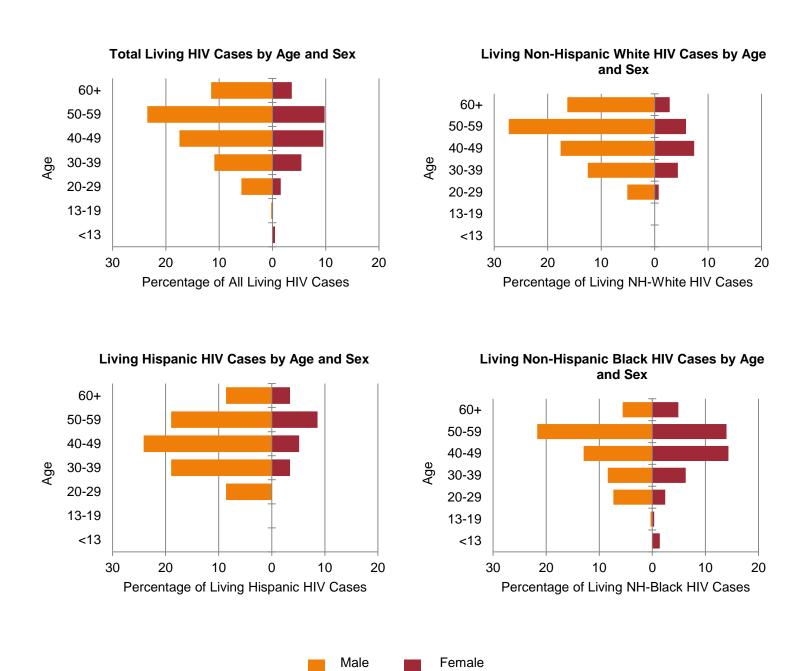
With Test: Number and percent of adult/adolescent total living HIV cases with a recent viral load test result.

**Percent Suppressed:** Percent of adult/adolescent total living HIV cases with a recent viral load test result measured in the specified year of less than 200 copies per milliliter.

**Median Unsuppressed:** Median unsuppressed viral load (copies per milliliter) among adult/adolescent total living HIV cases with the most recent viral load test result measured in the specified year of 200 copies per milliliter or greater.

### Section VII – HIV Cases by Expanded Demographics

Figure 9 – Population Pyramids of Total Living HIV Cases by Current Age, Sex at Birth, and Race/Ethnicity, Alive on 12/31/2016 and Reported through 6/30/2017



**Total Living HIV Cases:** Reported HIV diagnoses with or without an AIDS diagnosis and not reported to have died as of December 31st of the specified year.

Table 15 – Total Living Male HIV Cases by Current Age and Race/Ethnicity, Alive on 12/31/2016 and Reported through 6/30/2017

		TOTAL	LIVING MALE HIV	CASES		
			RACE/E	THNICITY		
AGE ON 12/31/2016		Hispanic	Non- Hispanic Black, only	Non- Hispanic White, only	Non- Hispanic Other Race	TOTAL MALES BY AGE GROUP
	Population	4,157	3,724	27,685	3,885	39,452
<13 (Pediatric)	Cases	0	0	0	0	0
<13 (Pediatric)	Rate	0.0	0.0	0.0	0.0	0.0
	Ratio (1 in X)					
	Population	2,075	2,650	17,081	1,887	23,692
13-19	Cases	0	1	0	1	2
13-19	Rate	0.0	37.7	0.0	53.0	8.4
	Ratio (1 in X)		2,649		1,887	11,846
	Population	2,639	5,437	24,059	1,791	33,926
20-29	Cases	5	21	20	2	48
20-29	Rate	189.5	386.2	83.1	111.7	141.5
	Ratio (1 in X)	527	258	1,202	895	706
	Population	3,152	4,779	22,972	1,571	32,474
30-39	Cases	11	24	49	6	90
30-39	Rate	349.0	502.2	213.3	381.9	277.1
	Ratio (1 in X)	286	199	468	261	360
	Population	2,242	4,451	25,623	1,706	34,022
40-49	Cases	14	37	69	24	144
40-49	Rate	624.4	831.3	269.3	1,406.8	423.3
	Ratio (1 in X)	160	120	371	71	236
	Population	1,344	3,181	31,443	1,230	37,198
50-59	Cases	***	62	107	***	194
30-39	Rate	***	1,949.1	340.3	***	521.5
	Ratio (1 in X)	***	51	293	***	191
	Population	890	2,120	45,626	1,308	49,944
60+	Cases	***	16	64	***	95
60+	Rate	***	754.7	140.3	***	190.2
	Ratio (1 in X)	***	132	712	***	525
T	Population	16,499	26,342	194,489	13,378	250,708
TOTAL MALES BY	Cases	46	161	309	57	573
RACE/ETHNICITY	Rate	278.8	611.2	158.9	426.1	228.6
	Ratio (1 in X)	358	163	629	234	437

Age on [date]: Age group of living cases on the specified date.

**Total Living Male HIV Cases:** Reported HIV diagnoses with Male sex at birth with or without an AIDS diagnosis and not reported to have died as of December 31<sup>st</sup> of the specified year.

Population: Population estimate for 7/1/2016.

Rate: Number of HIV cases divided by the population age 13 years or older multiplied by 100,000.

Ratio (1 in X): Number of people for every 1 living HIV case in the population, or 1 living HIV case in every X number of people.

Table 16 – Total Living Female HIV Cases by Current Age and Race/Ethnicity, Alive on 12/31/2016 and Reported through 6/30/2017

		TOTAL L	IVING FEMALE HIV	/ CASES		
			RACE/E1	THNICITY		
AGE ON 12/31/2016		Hispanic	Non- Hispanic Black, only	Non- Hispanic White, only	Non- Hispanic Other Race	TOTAL FEMALES BY AGE GROUP
	Population	3,976	3,662	26,143	3,837	37,618
<13 (Pediatric)	Cases	0	4	0	0	4
<13 (Pediatric)	Rate	0.0	109.2	0.0	0.0	10.6
	Ratio (1 in X)		915			9,404
	Population	1,844	2,312	15,982	1,984	22,122
13-19	Cases	0	1	0	0	1
13-19	Rate	0.0	43.2	0.0	0.0	4.5
	Ratio (1 in X)		2,312			22,121
	Population	2,041	2,792	22,947	1,970	29,750
20-29	Cases	0	7	3	3	13
20-29	Rate	0.0	250.7	13.1	152.3	43.7
	Ratio (1 in X)		398	7,649	656	2,288
	Population	2,434	2,431	22,806	2,064	29,735
30-39	Cases	2	18	17	8	45
30-39	Rate	82.2	740.4	74.5	387.6	151.3
	Ratio (1 in X)	1,217	135	1,341	258	660
	Population	2,060	2,590	26,343	1,827	32,820
40-49	Cases	3	41	29	6	79
40-49	Rate	145.6	1,583.0	110.1	328.4	240.7
	Ratio (1 in X)	686	63	908	304	415
	Population	1,281	2,279	32,027	1,438	37,025
50-59	Cases	***	40	23	***	81
50-59	Rate	***	1,755.2	71.8	***	218.8
	Ratio (1 in X)	***	56	1,392	***	457
	Population	1,118	2,422	54,630	1,490	59,660
00.	Cases	***	14	11	***	30
60+	Rate	***	578.0	20.1	***	50.3
	Ratio (1 in X)	***	173	4,966	***	1,988
	Population	14,754	18,488	200,878	14,610	248,730
TOTAL FEMALES	Cases	12	125	83	33	253
BY RACE/ETHNICITY	Rate	81.3	676.1	41.3	225.9	101.7
TAOL/LIMNOTT	Ratio (1 in X)	1,229	147	2,420	442	983

Age on [date]: Age group of living cases on the specified date.

**Total Living Female HIV Cases:** Reported HIV diagnoses with Female sex at birth with or without an AIDS diagnosis and not reported to have died as of December 31<sup>st</sup> of the specified year.

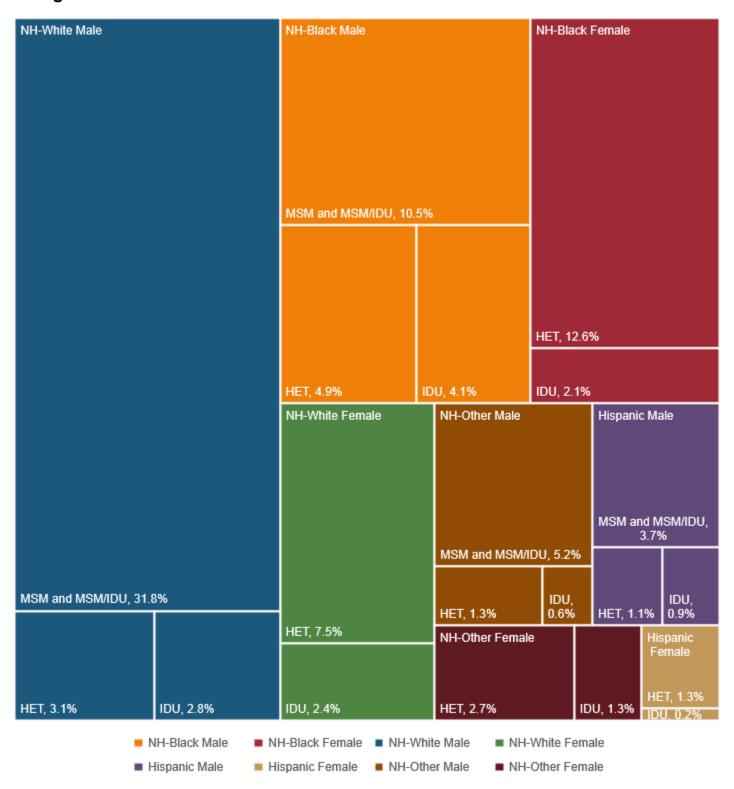
Population: Population estimate for 7/1/2016.

Rate: Number of HIV cases divided by the population age 13 years or older multiplied by 100,000.

Ratio (1 in X): Number of people for every 1 living HIV case in the population, or 1 living HIV case in every X number of people.

### Section VIII – HIV Exposure Category

Figure 10 – Proportion of Adult/Adolescent Total Living HIV Cases, by Estimated Exposure Category, Race/Ethnicity, and Sex at Birth, Alive on 12/31/2016, Reported through 6/30/2017



Other exposure category not shown (0.2%).

Multiple imputation was used to estimate and adjust for missing transmission category.

Men who have Sex with Men (MSM): Men who report a history of sexual contact with other men (homosexual contact) including men who report sexual contact with both men and women (bisexual contact).

**Injection Drug Use (IDU):** Men or women who report receiving an injection, either self-administered or given by another person, of a drug that was not prescribed by a physician.

MSM/IDU: Men who report a history of sexual contact with other men who also have engaged in injection drug use.

**Heterosexual Exposure (HET)**: Men or women who report a history of sexual contact with a person of the opposite sex who is known to have an HIV infection or at high risk for an HIV infection. High risk groups include bisexual men, IDUs and recipients of blood, blood components, transplants of organ or tissue and artificial insemination.

Table 17 – Adult/Adolescent HIV Diagnoses during 2016, Linked to Care, Late Diagnosis, and First CD4 Test Result, by Exposure Category and Sex at Birth, Reported through 6/30/2017

		Ac	OULT/ADOLESCE	NT REPORTED	HIV DIAGNOSE	s	
Exposure Category**	No.	% of Total	Linked t	o Care	Late HIV Diagnoses	First CD4	Test Result
	NO.	Exposure	% 1 mo.	% 3 mo.	%		
With Exposure	18	100.0%	83.3%	94.4%	***	94.4%	370
Men who have Sex with Men (MSM)	11	61.1%	72.7%	90.9%	***	90.9%	351
Injection Drug Users (IDU)	0	0.0%					
Men who have Sex with Men and Inject Drugs (MSM/IDU)	0	0.0%					
Heterosexual Exposure (HET)	7	38.9%	100.0%	100.0%	***	100.0%	370
Other Exposure	0	0.0%					
No Reported Exposure	7		100.0%	100.0%	14.3%	100.0%	421
TOTAL	25	-	88.0%	96.0%	20.0%	96.0%	376

		<b>A</b> DU	LT/ADOLESCE	NT REPORTED	PORTED HIV DIAGNOSES						
Male Exposure Category**	No.	% of Total with	Linked	to Care	Late HIV Diagnoses	First CD4	Test Result				
	Exposure	% 1 mo.	% 3 mo.	%	%	Median Count					
With Exposure	14	100.0%	78.6%	92.9%	***	92.9%	323				
Men who have Sex with Men (MSM)	11	78.6%	***	***	***	***	***				
Injection Drug Users (IDU)	0	0.0%									
Men who have Sex with Men and Inject Drugs (MSM/IDU)	0	0.0%									
Heterosexual Exposure (HET)	3	21.4%	***	***	***	***	***				
Other Exposure	0	0.0%									
No Reported Exposure	6		100.0%	100.0%	16.7%	100.0%	379				
TOTAL	20		85.0%	95.0%	20.0%	95.0%	337				

		ADL	ILT/ADOLESCE	NT REPORTED	HIV DIAGNOSE	IOSES					
FEMALE EXPOSURE CATEGORY**	No.	% of Total with	Linked	to Care	Late HIV Diagnoses	First CD4 T	est Result				
	NO.	Exposure	% 1 mo.	% 3 mo.	%	% Coun	Median Count				
With Exposure	4	100.0%	***	***	***	***	***				
Injection Drug Users (IDU)	0	0.0%									
Heterosexual Exposure (HET)	4	100.0%	***	***	***	***	***				
Other Exposure	0	0.0%									
No Reported Exposure	1		100.0%	100.0%	0.0%	100.0%	870				
TOTAL	5	•	100.0%	100.0%	20.0%	100.0%	435				

<sup>\*\* 2016</sup> reported HIV exposure data are preliminary.

**Adult/Adolescent Reported HIV Diagnoses:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an initial HIV diagnosis during the specified year.

**Linked to Care:** Percent of adult/adolescent reported HIV diagnoses with a reported CD4 or viral load test performed less than or equal to 1 month or 3 months after their initial HIV diagnosis.

**Late HIV Diagnosis:** Percent of adult/adolescent reported HIV diagnoses with an initial AIDS diagnosis less than or equal to 12 months after their initial HIV diagnosis.

<sup>\*\*\*</sup> Data withheld due to low population and/or case counts

**First CD4 Test Result Percent:** Percent of adult/adolescent reported HIV diagnoses with the first CD4 test result reported within 12 months following the initial HIV diagnosis.

**First CD4 Test Result Median Count:** Median CD4 count (cells per microliter) of the first CD4 test result reported within 12 months following initial HIV diagnosis.

Table 18 – Adult/Adolescent Living HIV Cases Alive on 12/31/2016, by Exposure Category and Sex at Birth, Reported through 6/30/2017

	ADULT/ADOLESCENT TOTAL LIVING HIV CASES						
Exposure Category	No.	% of Total with Exposure	% Living with AIDS				
With Exposure	701	100.0%	55.5%				
Men who have Sex with Men (MSM)	331	47.2%	48.9%				
Injection Drug Users (IDU)	100	14.3%	69.0%				
Men who have Sex with Men and Inject Drugs (MSM/IDU)	34	4.9%	67.6%				
Heterosexual Exposure (HET)	234	33.4%	56.8%				
Other Exposures	2	0.3%	100.0%				
No Reported Exposure*	115		32.2%				
TOTAL	816		52.2%				

	ADULT/ADOLESCENT TOTAL LIVING HIV CASES					
Male Exposure Category	No.	% of Total with Exposure	% Living with AIDS			
With Exposure	501	100.0%	54.9%			
Men who have Sex with Men (MSM)	331	66.1%	48.9%			
Injection Drug Users (IDU)	61	12.2%	73.8%			
Men who have Sex with Men and Inject Drugs (MSM/IDU)	34	6.8%	67.6%			
Heterosexual Exposure (HET)	74	14.8%	59.5%			
Other Exposures	1	0.2%	100.0%			
No Reported Exposure	69		36.2%			
TOTAL	570		52.6%			

	Adult/Adolescent Total Living HIV Cases						
FEMALE EXPOSURE CATEGORY	No.	% of Total with Exposure	% Living with AIDS				
With Exposure	200	100.0%	57.0%				
Injection Drug Users (IDU)	39	19.5%	61.5%				
Heterosexual Exposure (HET)	160	80.0%	55.6%				
Other Exposures	1	0.5%	100.0%				
No Reported Exposure*	46		26.1%				
TOTAL	246	-	51.2%				

<sup>\*</sup> Includes 2 living HIV cases with Presumed Female Heterosexual exposure

**Percent Living with AIDS:** The percent of reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an AIDS diagnosis, and not reported to have died as of December 31<sup>st</sup> of the specified year.

Table 19 – Adult/Adolescent Total Living HIV Cases by Exposure Category, Race/Ethnicity, and Sex at Birth, Alive on 12/31/2016 and Reported through 6/30/2017

		Adult/Adolescent Total Living HIV Cases						
	Race/Ethnicity							
Exposure Category	Hi	ispanic	Non-Hispa	nic, Black, only	Non-Hispa	anic, White, only		
	No.	% of Total with Exposure	No.	% of Total with Exposure	No.	% of Total with Exposure		
With Exposure	49	100.0%	234	100.0%	338	100.0%		
Men who have Sex with Men (MSM)	21	42.9%	64	27.4%	212	62.7%		
Injection Drug Users (IDU)	***	***	43	18.4%	37	10.9%		
Men who have Sex with Men and Inject Drugs (MSM/IDU)	***	***	10	4.3%	18	5.3%		
Heterosexual Exposure (HET)	18	36.7%	117	50.0%	70	20.7%		
Other Exposures	0	0.0%	0	0.0%	1	0.3%		
No Reported Exposure*	9		45		52			
TOTAL	58		279	·	390			

	Adult/Adolescent Total Living HIV Cases							
	Race/Ethnicity							
Male Exposure Category	Н	ispanic	Non-Hispa	nic, Black, only	Non-Hispa	nic, White, only		
	No.	% of Total with Exposure	No.	% of Total with Exposure	No.	% of Total with Exposure		
With Exposure	39	100.0%	138	100.0%	273	100.0%		
Men who have Sex with Men (MSM)	21	53.8%	64	46.4%	212	77.7%		
Injection Drug Users (IDU)	***	***	30	21.7%	21	7.7%		
Men who have Sex with Men and Inject Drugs (MSM/IDU)	***	***	10	7.2%	18	6.6%		
Heterosexual Exposure (HET)	***	***	34	24.6%	21	7.7%		
Other Exposures	0	0.0%	0	0.0%	1	0.4%		
No Reported Exposure	7		21		36			
TOTAL	46		159		309			

		Adult/Adolescent Total Living HIV Cases							
		Race/Ethnicity							
FEMALE EXPOSURE CATEGORY	Hispanic		Non-Hispa	nic, Black, only	Non-Hispanic, White, only				
	No.	% of Total with Exposure	No.	% of Total with Exposure	No.	% of Total with Exposure			
With Exposure	10	100.0%	96	100.0%	65	100.0%			
Injection Drug Users (IDU)	***	***	13	13.5%	16	24.6%			
Heterosexual Exposure (HET)	***	***	83	86.5%	49	75.4%			
Other Exposures	0	0.0%	0	0.0%	0	0.0%			
No Reported Exposure*	2		24	·	16				
TOTAL	12		120		81				

<sup>\*</sup> Includes 2 non-Hispanic black cases with Presumed Female Heterosexual exposure

Table 20 – CD4 Test Results during 2016 for Adult/Adolescent HIV Cases Alive on 12/31/2016, by Exposure Category, Reported through 6/30/2017

			ADULT/AD	OLESCENT TO	TAL LIVING H	IIV CASES		
Exposure Category		Recent CD4 Test Results						
	No.	No. with Test	% with Test	Median Count	<200	200-349	350-499	500+
With Exposure	701	528	75.3%	630	6.8%	10.2%	15.3%	67.6%
Men who have Sex with Men (MSM)	331	247	74.6%	662	5.3%	10.1%	11.7%	72.9%
Injection Drug Users (IDU)	100	72	72.0%	570	9.7%	15.3%	19.4%	55.6%
Men who have Sex with Men and Inject Drugs (MSM/IDU)	34	23	67.6%	549	4.3%	4.3%	30.4%	60.9%
Heterosexual Exposure (HET)	234	184	78.6%	639	8.2%	9.2%	16.3%	66.3%
Other Exposures	2	2	100.0%	521	0.0%	0.0%	50.0%	50.0%
No Reported Exposure*	115	68	59.1%	586	2.9%	19.1%	5.9%	72.1%
TOTAL	816	596	73.0%	627	6.4%	11.2%	14.3%	68.1%

<sup>\*</sup> Includes 2 cases with Presumed Female Heterosexual exposure

Table 21 – Viral Load Test Results during 2016 for Adult/Adolescent HIV Cases Alive on 12/31/2016, by Exposure Category, Reported through 6/30/2017

		ADULT/ADOLESCENT TOTAL LIVING HIV CASES							
Exposure Category	No		Recent Viral Lo	ad Test Results					
	No.	No. with Test	% with Test	% Suppressed	Median Count				
With Exposure	701	528	75.3%	86.9%	7,943				
Men who have Sex with Men (MSM)	331	246	74.3%	87.8%	11,340				
Injection Drug Users (IDU)	100	73	73.0%	78.1%	3,024				
Men who have Sex with Men and Inject Drugs (MSM/IDU)	34	22	64.7%	90.9%	6,539				
Heterosexual Exposure (HET)	234	185	79.1%	88.6%	9,724				
Other Exposures	2	2	100.0%	100.0%					
No Reported Exposure*	115	69	60.0%	89.9%	13,554				
TOTAL	816	597	73.2%	87.3%	8,140				

<sup>\*</sup> Includes 2 cases with Presumed Female Heterosexual exposure

Recent CD4 Test Result: The most recent CD4 test result measured in the specified year.

CD4 With Test: Number and percent of adult/adolescent total living HIV cases with a recent CD4 test result.

**Median Count:** Median CD4 count (cells per microliter), among adult/adolescent total living HIV cases, of the most recent CD4 test result measured in the specified year.

**CD4 Result Distribution (<200, 200-349, 350-499, 500+):** Percent of adult/adolescent living HIV cases with a recent CD4 test result distributed by the CD4 count results (cells per microliter).

Recent Viral Load Test Result: The most recent viral load test result measured in the specified year.

Viral Load With Test: Number and percent of adult/adolescent total living HIV cases with a recent viral load test result.

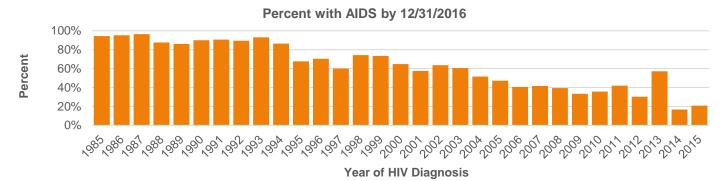
**Percent Suppressed:** Percent of adult/adolescent total living HIV cases with a recent viral load test result measured in the specified year of less than 200 copies per milliliter.

**Median Unsuppressed:** Median unsuppressed viral load (copies per milliliter) among adult/adolescent total living HIV cases with the most recent viral load test result measured in the specified year of 200 copies per milliliter or greater.

### Section IX - Disease Progression and Mortality

# Figure 11 – Trends in Disease Progression by Year of HIV Diagnosis, 1985-2015, Reported through 6/30/2017

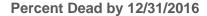
Number of Adult/Adolescent Reported HIV Cases, Age 13+ at HIV Diagnosis, with or without an AIDS Diagnosis by 12/31/2015 (Adult/Adolescent Reported HIV Diagnoses), Number of Adult/Adolescent Reported HIV Cases with an AIDS Diagnosis by 12/31/2016 (Reported AIDS Diagnoses), Percent by Year of HIV Diagnosis of Adult/Adolescent Reported HIV Diagnoses with a Reported AIDS Diagnosis by 12/31/2016, the Average Years from HIV Diagnosis to AIDS Diagnosis for Cases with an AIDS Diagnosis, and the Percent by Year of HIV Diagnosis of Reported Adult/Adolescent HIV Diagnoses with a Reported AIDS Diagnosis at 1 Year, 2 Years, 5 Years, and 10 Years after HIV Diagnosis, by Year of HIV Diagnosis from 1985 through 2015, as Reported by Name through 6/30/2017

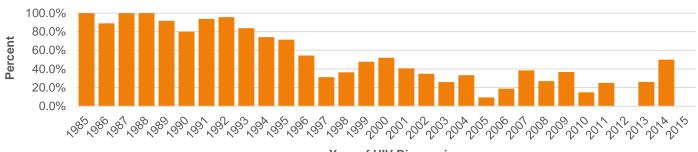


			Adult/Ad	OLESCENT REPORTED I	HIV DIAGNOSI	ES		
YEAR OF HIV		Re	ported AIDS Diag	gnoses	Percent wi	th AIDS by	ears After HI	V Diagnosis
DIAGNOSIS	No.	No.	% with AIDS	Mean Years from HIV to AIDS	1 Year	2 Years	5 Years	10 Years
<1985	9	9	100.0%	6.0	55.6%	55.6%	55.6%	66.7%
1985	18	17	94.4%	7.2	22.2%	27.8%	44.4%	66.7%
1986	21	20	95.2%	4.5	47.6%	52.4%	57.1%	81.0%
1987	28	27	96.4%	4.9	42.9%	46.4%	57.1%	78.6%
1988	24	21	87.5%	5.2	41.7%	45.8%	58.3%	62.5%
1989	43	37	86.0%	2.8	48.8%	55.8%	67.4%	79.1%
1990	30	27	90.0%	4.7	23.3%	36.7%	63.3%	76.7%
1991	43	39	90.7%	3.4	48.8%	55.8%	69.8%	76.7%
1992	38	34	89.5%	3.3	42.1%	52.6%	73.7%	78.9%
1993	43	40	93.0%	2.7	55.8%	65.1%	76.7%	83.7%
1994	22	19	86.4%	2.0	59.1%	72.7%	72.7%	81.8%
1995	34	23	67.6%	3.3	38.2%	41.2%	44.1%	64.7%
1996	37	26	70.3%	2.9	43.2%	45.9%	56.8%	64.9%
1997	30	18	60.0%	3.6	36.7%	36.7%	40.0%	53.3%
1998	31	23	74.2%	1.1	61.3%	64.5%	67.7%	71.0%
1999	30	22	73.3%	2.8	46.7%	46.7%	63.3%	63.3%
2000	34	22	64.7%	2.2	44.1%	44.1%	55.9%	58.8%
2001	40	23	57.5%	1.7	37.5%	40.0%	50.0%	57.5%
2002	44	28	63.6%	2.5	38.6%	38.6%	54.5%	59.1%
2003	33	20	60.6%	2.0	39.4%	45.5%	48.5%	57.6%
2004	33	17	51.5%	0.5	48.5%	48.5%	51.5%	51.5%
2005	34	16	47.1%	1.5	32.4%	38.2%	41.2%	44.1%
2006	37	15	40.5%	1.4	29.7%	35.1%	37.8%	37.8%
2007	53	22	41.5%	0.5	37.7%	37.7%	41.5%	
2008	71	28	39.4%	1.4	28.2%	29.6%	35.2%	
2009	30	10	33.3%	1.2	26.7%	26.7%	30.0%	
2010	42	15	35.7%	0.7	31.0%	31.0%	33.3%	
2011	31	13	41.9%	0.1	41.9%	41.9%	41.9%	
2012	33	10	30.3%	0.5	27.3%	27.3%		
2013	28	16	57.1%	0.5	46.4%	50.0%		
2014	24	4	16.7%	0.0	16.7%	16.7%		
2015	24	5	20.8%	0.4	20.8%			
TOTAL	1,072	666	62.1%	2.7	39.1%	42.5%	50.4%	56.5%

## Figure 12 – Trends in Survival Times by Year of AIDS Diagnosis, 1985-2015, Reported through 6/30/2017

Number of Adult/Adolescent Reported HIV Cases, Age 13+ at HIV Diagnosis, with an AIDS Diagnosis by 12/31/15 (Adult/Adolescent Reported AIDS Diagnoses), Number of Adult/Adolescent Reported AIDS Diagnosis Reported to Have Died of Any Cause by 12/31/2016 (Reported AIDS Deaths), Percent by Year of AIDS Diagnosis of Adult/Adolescent Reported AIDS Diagnoses with a Reported AIDS Death (Percent Dead) by 12/31/2016, the Average Years from AIDS Diagnosis to Death for Cases that have Died, and the Percent by Year of AIDS Diagnosis of Adult/Adolescent Reported AIDS Diagnoses Not Reported to Have Died (Percent Alive) at 1 Year, 2 Years, 5 Years, and 10 Years after AIDS Diagnosis, by Year of AIDS Diagnosis from 1985 through 2015, as Reported by Name through 6/30/2017.





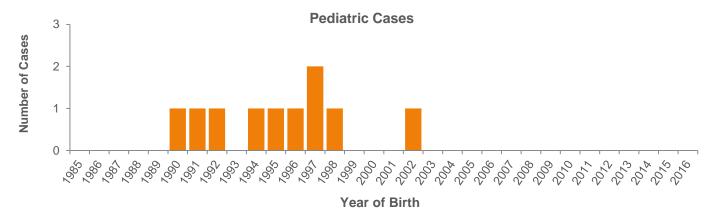
Year of	f HIV Dia	agnosis
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ADULT/ADOLESCENT REPORTED AIDS DIAGNOSES								
YEAR OF	_	Repo	rted AIDS De	aths	Percent Alive by Years After AIDS Diagnosis			agnosis
YEAR OF AIDS DIAGNOSIS	No.	No.	% Dead	Mean Years from AIDS to Death	1 Year	2 Years	5 Years	10 Years
<1985	5	5	100.0%	1.5	40.0%	20.0%	20.0%	0.0%
1985	3	3	100.0%	1.0	66.7%	0.0%	0.0%	0.0%
1986	9	8	88.9%	0.7	22.2%	11.1%	11.1%	11.1%
1987	13	13	100.0%	1.2	38.5%	23.1%	7.7%	0.0%
1988	13	13	100.0%	2.1	69.2%	23.1%	15.4%	0.0%
1989	24	22	91.7%	3.2	70.8%	45.8%	25.0%	12.5%
1990	5	4	80.0%	5.0	80.0%	60.0%	40.0%	40.0%
1991	32	30	93.8%	3.0	75.0%	53.1%	28.1%	15.6%
1992	23	22	95.7%	4.3	78.3%	60.9%	26.1%	21.7%
1993	37	31	83.8%	3.7	75.7%	59.5%	29.7%	24.3%
1994	27	20	74.1%	4.0	81.5%	48.1%	44.4%	37.0%
1995	35	25	71.4%	6.4	80.0%	74.3%	65.7%	48.6%
1996	22	12	54.5%	6.8	86.4%	86.4%	81.8%	59.1%
1997	16	5	31.3%	6.4	100.0%	93.8%	87.5%	75.0%
1998	22	8	36.4%	7.0	95.5%	95.5%	86.4%	68.2%
1999	23	11	47.8%	5.8	95.7%	87.0%	82.6%	56.5%
2000	25	13	52.0%	6.2	84.0%	84.0%	72.0%	68.0%
2001	27	11	40.7%	5.0	96.3%	92.6%	77.8%	63.0%
2002	23	8	34.8%	2.7	82.6%	82.6%	69.6%	65.2%
2003	27	7	25.9%	4.5	88.9%	88.9%	88.9%	74.1%
2004	18	6	33.3%	8.2	100.0%	100.0%	94.4%	83.3%
2005	21	2	9.5%	5.5	95.2%	95.2%	95.2%	95.2%
2006	16	3	18.8%	4.1	93.8%	93.8%	87.5%	81.3%
2007	26	10	38.5%	4.7	92.3%	92.3%	84.6%	
2008	26	7	26.9%	3.8	88.5%	88.5%	88.5%	
2009	19	7	36.8%	4.4	94.7%	94.7%	84.2%	
2010	20	3	15.0%	2.7	95.0%	90.0%	90.0%	
2011	16	4	25.0%	1.8	87.5%	87.5%	75.0%	
2012	13	0	0.0%		100.0%	100.0%		
2013	23	6	26.1%	0.1	73.9%	73.9%		
2014	8	4	50.0%	0.4	50.0%	50.0%		
2015*	5	0	0.0%		100.0%			
TOTAL	622	323	51.9%	4.0	83.4%	75.1%	65.0%	54.2%

#### Section X – Pediatric Cases

#### Figure 13 – Trends in Pediatric HIV Cases, 1985-2016, Reported through 6/30/2017

Number of Pediatric Reported HIV Cases, Age <13 at HIV Diagnosis, with or without an AIDS Diagnosis (Pediatric Reported HIV Diagnoses) by Year of Birth, by Year of HIV Diagnosis, by Year of AIDS Diagnosis, and by Year of Death Due to Any Cause, and Number of Pediatric Reported HIV Cases, Age <13 at HIV Diagnosis, with or without an AIDS Diagnosis and Not Reported to have Died as of December 31st of Each Year (Pediatric Total Living HIV Cases) from 1985 through 2016, as Reported by Name through 6/30/2017



		PEDIATRIC REPORTEI	D HIV DIAGNOSES		PEDIATRIC TOTAL LIVING HIV CASES
YEAR	No. by Year of Birth	No. by Year of HIV Diagnosis	No. by Year of AIDS Diagnosis	No. by Year of Death	No. Alive on 12/31 of Each Year
<1985	3	0	0	0	
1985	0	1	0	0	1
1986	0	1	0	0	2
1987	0	0	0	0	2
1988	0	1	0	0	3
1989	0	0	1	0	3
1990	1	0	0	0	3
1991	1	1	1	1	4
1992	1_	1	1	0	5
1993	0	1	1	0	6
1994	1	0	1	2	4
1995	1	1	0	0	5
1996	1	1	1	1	5
1997	2	2	0	0	7
1998	1	0	0	0	7
1999	0	0	0	0	7
2000	0	0	0	0	7
2001	0	0	0	0	7
2002	1	0	0	0	7
2003	0	0	0	0	7
2004	0	0	0	0	7
2005	0	0	1	0	6
2006	0	0	0	0	6
2007	0	1	0	0	7
2008	0	2	0	0	9
2009	0	0	0	0	9
2010	0	0	0	0	9
2011	0	0	0	0	9
2012	0	0	0	1	9
2013	0	0	0	0	10
2014	0	0	0	1	9
2015	0	0	0	0	9
2016	0	0	0	0	9

Total 13 13 7 6 --

# Table 22 – Pediatric HIV Total Living HIV Cases, Diagnosed in Maryland, Alive on 12/31/2016, by Jurisdiction, Reported through 6/30/2017

JURISDICTION OF RESIDENCE AT DIAGNOSIS	PEDIATRIC TOTAL LIVING HIV CASES		
JURISDICTION OF RESIDENCE AT DIAGNOSIS	No.	% of Total	
Allegany	1	11.1%	
Frederick	6	66.7%	
Garrett	0	0.0%	
Washington	2	22.2%	
TOTAL	9	100.0%	

**Jurisdiction of Residence at Diagnosis:** Jurisdiction of residence at later time of initial HIV diagnosis or initial AIDS diagnosis.

**Pediatric Total Living HIV Cases:** Reported HIV diagnosis, age less than 13 years at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

Table 23 – Pediatric Total Living HIV Cases, Diagnosed in Maryland, by Sex at Birth and Race/Ethnicity, Alive on 12/31/2016 and Reported through 6/30/2017

SEX AT BIRTH	PEDIATRIC TOTAL LIVING HIV CASES			
SEX AT BIRTH	No.	% of Total		
Male	3	33.3%		
Female	6	66.7%		
TOTAL	9	100.0%		

RACE/ETHNICITY	PEDIATRIC TOTAL LIVING HIV CASES			
RACE/ETHNICITY	No.	% of Total		
Hispanic	1	11.1%		
Non-Hispanic	8	88.9%		
American Indian/ Alaska Native, only	1	11.1%		
Asian, only	0	0.0%		
Black, only	5	55.6%		
Native Hawaiian/Other Pacific Islander, only	0	0.0%		
White, only	2	22.2%		
Multiracial/Other	0	0.0%		
Total	9	100.0%		

**Pediatric Total Living HIV Cases:** Reported HIV diagnosis, age less than 13 years at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31<sup>st</sup> of the specified year.

### Glossary of Terms

**Adult/Adolescent Living HIV Cases with AIDS:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

**Adult/Adolescent Living HIV Cases without AIDS:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, without an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

**Adult/Adolescent Reported AIDS Diagnoses:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an initial AIDS diagnosis during the specified year.

**Adult/Adolescent Reported HIV Diagnoses:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an initial HIV diagnosis during the specified year.

**Adult/Adolescent Total Living HIV Cases:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

Age at AIDS Diagnosis: Age group at time of initial AIDS diagnosis.

Age at HIV Diagnosis: Age group at time of initial HIV diagnosis.

**Age on [date]:** Age group of living cases on the specified date.

AIDS Deaths: Reported HIV diagnoses with an AIDS diagnosis that have died due to any cause.

CD4 Result Distribution (<200, 200-349, 350-499, 500+): Percent of cases with a CD4 test distributed by their CD4 count results (cells per microliter).

CD4 With Test: Number and percent of adult/adolescent total living HIV cases with a recent CD4 test result.

Corrections: Residence in a state or federal prison. Does not include local jails and detention centers.

Current Residence: Jurisdiction of residence from the most recent report since 1/1/2009.

First CD4 Test Result Median Count: Median CD4 count (cells per microliter) of the first CD4 test result reported within 12 months following initial HIV diagnosis.

**First CD4 Test Result Percent:** Percent of adult/adolescent reported HIV diagnoses with the first CD4 test result reported within 12 months following the initial HIV diagnosis.

Jurisdiction of Current Residence: Jurisdiction of residence from the most recent report since 1/1/2009.

Jurisdiction of Residence: Jurisdiction of residence at diagnosis or current residence.

Jurisdiction of Residence at AIDS Diagnosis: Jurisdiction of residence at time of initial AIDS diagnosis.

**Jurisdiction of Residence at Diagnosis:** Jurisdiction of residence at the later time of initial HIV diagnosis or time of initial AIDS diagnosis.

Jurisdiction of Residence at HIV Diagnosis: Jurisdiction of residence at time of initial HIV diagnosis.

**Late HIV Diagnosis:** Percent of adult/adolescent reported HIV diagnoses with an initial AIDS diagnosis less than or equal to 12 months after their initial HIV diagnosis.

**Linked to Care:** Percent of adult/adolescent reported HIV diagnoses with a reported CD4 or viral load test performed less than or equal to 1 month or 3 months after their initial HIV diagnosis.

**Living HIV Cases with AIDS:** Reported HIV diagnoses with an AIDS diagnosis and not reported to have died as of December 31st of the specified year.

**Living HIV Cases without AIDS:** Reported HIV diagnoses without an AIDS diagnosis and not reported to have died as of December 31st of the specified year.

**Mean Years from HIV Diagnosis:** Mean or average number of years from initial HIV diagnosis to initial AIDS diagnosis for cases with a reported AIDS diagnosis.

**Mean Years from AIDS diagnosis to AIDS Death:** Mean or average number of years from initial AIDS diagnosis to death for adult/adolescent reported AIDS diagnoses with a reported death.

**Median Count:** Median CD4 count (cells per microliter), among adult/adolescent total living HIV cases, of the most recent CD4 test result measured in the specified year.

**Median Unsuppressed:** Median unsuppressed viral load (copies per milliliter) among adult/adolescent living HIV cases with the most recent viral load test result measured in the specified year of 200 copies per milliliter or greater.

**Pediatric Total Living HIV Cases:** Reported HIV diagnosis, age less than 13 years at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31<sup>st</sup> of the specified year.

**Percent Change:** The percent change in number of adult/adolescent total living HIV cases from residence at diagnosis to current residence.

**Percent Alive by Years after AIDS Diagnosis:** Percent of adult/adolescent reported AIDS diagnoses not reported to have died at 1 year, 2 years, 5 years and 10 years after initial AIDS diagnosis, by year of AIDS diagnosis.

**Percent Late HIV Diagnosis:** Percent of adult/adolescent reported AIDS diagnoses with an initial HIV diagnosis less than or equal to 12 months prior to their initial AIDS diagnosis.

**Percent Suppressed:** Percent of adult/adolescent total living HIV cases with a recent viral load test result measured in the specified year of less than 200 copies per milliliter.

**Percent with AIDS:** Percent of adult/adolescent reported HIV diagnoses in the specified year with an initial AIDS diagnosis by 12/31/2016.

**Percent with AIDS by Years after HIV Diagnosis:** Percent of adult/adolescent reported HIV diagnoses in the specified year with an initial AIDS diagnosis at 1 year, 2 years, 5 years and 10 years after HIV diagnosis.

**Population:** Population estimate for 7/1/2016.

**Population Age 13+:** Population age 13 years or older, estimate for 7/1/2016.

Rate: Number of HIV cases divided by the population multiplied by 100,000.

Ratio (1 in X): Number of people for every 1 living HIV case in the population, or 1 living HIV case in every X number of people.

Recent CD4 Test Result: The most recent CD4 test result measured in the specified year.

Recent Viral Load Test Result: The most recent viral load test result measured in the specified year.

**Reported AIDS Deaths:** Reported HIV diagnoses with an AIDS diagnosis, reported to have died of any cause during the specified year.

Reported AIDS Diagnoses: Reported HIV diagnoses with an initial AIDS diagnosis during the specified year.

Reported HIV Diagnoses: Reported HIV diagnoses with an initial HIV diagnosis during the specified year.

**Residence at Diagnosis:** Jurisdiction of residence at later time of initial HIV diagnosis or initial AIDS diagnosis.

Retained in HIV Care: HIV Diagnosed with a CD4 test result performed in the specified year.

**Suppressed Viral Load:** HIV Diagnosed with the most recent viral load measured in the specified year of less than 200 copies per milliliter.

**Total Living HIV Cases:** Reported HIV diagnoses with or without an AIDS diagnosis and not reported to have died as of December 31<sup>st</sup> of the specified year.

Viral Load With Test: Number and percent of adult/adolescent total living HIV cases with a recent viral load test result.